MEDICARE HOSPITAL MORTALITY INFORMATION

86

Volume V

New Hampshire – Ohio

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Health Care Financing Administration

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MEDICARE HOSPITAL MORTALITY INFORMATION

1986

VOLUME V

NEW HAMPSHIRE - OHIO

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The Health Care Financing Administration (HCFA) was established on March 9, 1977, to combine health financing and quality assurance programs into a single agency. HCFA is responsible for the Medicare program, Federal participation in the Medicaid program, the Peer Review Organization program and a variety of other health care quality assurance programs.

The mission of the Health Care Financing Administration is to ensure the effective administration of our programs in order to promote the timely delivery of appropriate, quality health care to over 56 million of the nation's aged, disabled and poor. The agency must also ensure that beneficiaries are aware of the services for which they are eligible, that those services are accessible and of high quality and that agency policies and actions promote efficiency and quality within the total health care delivery system.

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DEPARTMENT OF HEALTH & HUMAN SERVICES
Health Care Financing Administration

The Administrator
Washington, D.C. 20201

INTRODUCTION

The nation's Medicare program, which is administered through the Health Care Financing Administration (HCFA) of the Department of Health and Human Services, now has 31 million beneficiaries. One of HCFA's primary responsibilities is to ensure that Medicare beneficiaries receive quality health care. We believe that the publication of the information contained in this document will contribute to that end.

This particular information release, presents information to answer the question: "What is the actual death rate for each hospital compared to what would have been expected for that particular hospital given what we know of the characteristics of patients admitted?" The statistics are presented in the hope that they will serve the public and the hospitals in their common interest of improving quality of care.

The development of mortality statistics is a complicated and controversial task since the mortality rate at a given hospital reflects, among other factors, age, sex, diagnosis, and severity of illness of patients admitted to that hospital, as well as the purpose and quality of the care they received. Characteristics affecting health and the probability of death vary among the patient populations served by individual hospitals. Consequently, the mortality rates in different patient populations will vary.

The usefulness of this information depends upon the accuracy with which mortality rates can be predicted and the stability of these rates over time for each hospital. It is important to understand that the predicted values in the tables contained in this document are not a direct measure of the quality of care rendered in hospitals. There is one primary reason for this. We do not now have any direct measurement tool with which we can adjust fully for differences among hospitals in how severely ill their patients are. For instance, two hospitals might have very different death rates for patients admitted for stroke, even after we have adjusted for age and sex. This might happen because one hospital's stroke patients consist of a significant number admitted in a coma and are thus likely to die, whereas another hospital's patient population represents a broader spectrum of patients with cerebrovascular problems, or because these hospitals in fact provide different levels of quality. In addition, other factors affecting the probability of death in a particular case, e.g., family status/support, and overall health status are not included in the predictive model because information on them is not readily available.

When properly understood and used, this information can be useful; it can also be very misleading if it is interpreted incorrectly. The information simply describes one aspect of individual hospital performance--post admission mortality for Medicare beneficiaries. The information is not necessarily representative of a hospital's total performance in all aspects of patient care, and is best used to view experience in individual hospitals rather than making comparisons among hospitals. Individual hospitals may have very good reasons for their rates being higher than the ranges predicted by HCFA's model. Accordingly, it was important for hospitals to have an opportunity to review their specific information and to provide comments to HCFA and the public. We asked each hospital to prepare its comments on the information being released to the public, and we are including those comments in this publication.

The information is an important contribution to the health care community and should be reviewed by a wide range of individuals and organizations including hospital administrators, Peer Review Organizations, physicians and researchers. Among these audiences, perhaps the hospital administrator will find the information most useful--as a screening tool and in consulting with medical staff to evaluate a hospital's strengths and weaknesses. In this way, the information should lead to analysis and subsequent actions which will capitalize on areas of strong performance and strengthen areas where improvement is needed. For example, we expect that hospitals and their medical staffs, using established and newly emerging quality assessment techniques, will try to determine what useful information can be derived about how they function.

Consumers should read the explanations of the uses and limitations of the information, as well as any comments a hospital may have provided, and should carefully consider the different roles that different hospitals play in their community. For example, one hospital might have different death rates than another because it serves more severely ill patients, because it specializes in difficult illnesses, or because it is a trauma or emergency center.

The development and presentation of this information is an important part of HCFA's responsibilities in the health care community, and follows nearly a full year of effort. In making the information as accurate and useful as possible, we discussed the theoretical framework and statistical approach with a number of national experts in appropriate fields. As a result, we believe the models used in this work are reasonable and appropriate for the intent of the publication. In addition, the format for presentation, the process for sharing the information with individual hospitals, and the statistical methodology have been discussed at a series of meetings with leaders of organizations representing Medicare beneficiaries, doctors and hospitals, and a great many suggestions from these groups have been incorporated into the final approach.

We are continuing to do everything we can to make these types of information more useful to both the public and the health care professions. We are refining ways to use the information as a screening tool for "quality of care" purposes, and we are developing tools to adjust for the differences in disease severity highlighted earlier. In addition, because we recognize that mortality rates alone do not adequately measure how effectively a hospital cares for its patients, we will be developing other measures of outcome, such as the kind of medical treatment needed after discharge, to assess the performance of hospitals more fully.

We have begun what will be a continuing effort involving all interested parties to improve the accuracy of outcome predictions by refining the model and the methodology. This will contribute to assessment of and improvement in the effectiveness of medical services.

William L. Roper M.D.

William L. Roper, M.D.
Administrator

DESCRIPTION OF INFORMATION

Before reading the tables containing the hospital specific information and the comments provided by individual hospitals, it would be useful to understand the format and presentation of the information in this document.

The information is presented in alphabetical order by state and by hospital within the state. For each hospital, information is presented for overall Medicare patient mortality and each of 16 diagnostic categories. The information consists of the number of Medicare patients, the actual mortality rate, and a range of predicted mortality given the mix of patients. It would be helpful to describe how the numbers were derived and what they represent.

o Number of Patients. This figure represents the number of individual Medicare beneficiaries whose last discharge from a short term, acute care hospital in 1986 was from the hospital listed. The total number for each hospital is presented under the category "overall." Similarly, for each diagnostic category, the number of patients consists of the number of Medicare beneficiaries whose last discharge in 1986 was from the hospital cited and whose primary diagnosis fell within the specific diagnostic category. (Generally the number of patients in the sixteen diagnostic categories will total between 70 percent and 80 percent of the figure for "overall." The remaining 20 percent to 30 percent represent diagnoses that do not fall within the 16 diagnostic categories specifically studied.)

Since only a patient's last hospital discharge is "counted" in the total number, HCFA's computation and that maintained by individual hospitals will generally differ. For example, if John Doe was a patient at Hospital A three times during 1986, the methodology used in HCFA's analysis counts only the last admission in the hospital's total. Normally a hospital will maintain statistics based on numbers of admissions and so would count Mr. Doe as three cases. In addition, in this example, if Mr. Doe were admitted later in the year to Hospital B (another acute care hospital) and then discharged in 1986, and this latter stay represented his last discharge for 1986, his case would be counted in Hospital B's total and he would not appear at all in Hospital A's count.

The key factor to remember is that we are examining last hospital discharges in 1986. In some cases, this will necessitate the inclusion of patients admitted to the hospital in December 1985 or those who died in January 1987.

o Actual Mortality Rate. This figure presents the percentage of each hospital's Medicare patients who died within 30 days of the admission that resulted in the last-occurring discharge of the patient in 1986. (The percentage is rounded to the nearest whole percentage point.)

Where, for example, Hospital A had a universe of 1000 patients whose last acute care hospital discharge in 1986 was from Hospital A, and 100 of these patients died within 30 days of that last admission, whether as hospital inpatients or after discharge, the actual mortality rate would be 10 percent. This rate includes cases in which a beneficiary was admitted to the hospital in 1985, was discharged in 1986 and died within 30 days of admission. It also includes those instances in which a beneficiary was discharged in 1986 and died within 30 days of admission even though the 30 day period extends into 1987. Cases in which the beneficiary was not discharged in 1986 are not part of the rate, even though an individual may have died in 1986 or have died within 30 days of last hospital admission. For example, a person admitted to a hospital on December 20, 1985, who was discharged on December 30, 1985 and who died on January 2, 1986 is not part of the calculation since the person was not discharged in 1986. Similarly, a person admitted to a hospital on December 28, 1986 who was discharged on January 5, 1987 and died on January 8, 1987 would not be a part of the calculation even though he or she died within 30 days of a 1986 admission.

- Range of Predicted Mortality. This column gives an estimate of mortality rates for patients equal in number and similar in characteristics to those treated by the hospital. The range is derived in part by determining, based on national experience, the relative risk of dying associated with various patient characteristics: previous hospital admission(s), transfer status, age, sex, and presence of up to eight comorbid conditions (cancer, cardiovascular disease, cerebral degeneration/psychosis, pulmonary disease, renal disease, liver disease, diabetes, hypertensive disease) and by applying weights of the risk factors to the actual number of patients at the hospital to enable compilation of an expected mortality rate. This rate is converted, through statistical techniques, to a range of predicted mortality rates. It is important to note that the fewer the number of cases included in a given diagnostic category, the greater the uncertainty of the expected mortality range, and therefore, the wider the range. A larger number of cases yields greater precision, and therefore, a more narrow range of predicted mortality rates.

HOSPITAL COMMENTS

On September 21, 1987, HCFA mailed to each hospital its own mortality information and asked for comments by October 28, 1987. These comments are arranged alphabetically by state and are included in this publication immediately after the tables presenting information for all the hospitals in a given state. The entry for each hospital on the state charts indicates where to find the hospital's comments and presents a notation (asterisk) advising of the absence of hospital comments. The page number where the comments of the hospital are presented is given next to the name and address of the hospital.

The comments are generally reproduced as submitted by the hospital. However, some hospitals returned to HCFA, an annotated copy of the information sent on September 21. These annotated materials have not been reproduced in this publication, even in those instances where they were the only form of comments submitted by a hospital. The reason for not printing these materials is one of privacy. Information which would identify or possibly identify patients must be deleted, and consequently any remaining information would be very confusing and of extremely limited use, if not totally useless. Therefore, we have included a statement to identify instances when these types of materials have not been included. As mentioned earlier, it is extremely important that the information presented in the tables be reviewed in concert with the hospital's comments.

In any project of this size, there will be instances where hospitals did not receive the information for comment or did not receive it timely. In fact, many hospitals were sent second copies of their specific information in an expeditious manner to allow every opportunity for review/study and comment. Although we have received over 2,600 comments out of a possible 5,971, it is possible that some of the non-responding facilities never got the information or did not have adequate time to comment. However, we expect these instances were few in number.

INFORMATION SOURCES AND NOTES

It is important to note that this publication is based primarily on analysis of Medicare hospital billing information for calendar year 1986. While information about beneficiaries, was obtained from the Social Security Administration (SSA), the principal source for the analysis was the HCFA maintained MEDPAR file which contains information about each Medicare hospitalization. Hospitals submit such information to HCFA's fiscal intermediaries (which pay hospitals for the care provided to Medicare beneficiaries). The file is updated quarterly. It is estimated that billing information on approximately 95% of all Medicare discharges is included in the MEDPAR file within 6 months of the close of the calendar year. Accordingly, our analysis was based on information received through June 30, 1987.

In any large scale data base such as one dealing with Medicare hospitalizations, there will be gaps or inaccuracies. The fact that the files contain information on about 10 million hospital admissions to nearly 6,000 hospitals provides some assurance that for purposes of the statistical analysis conducted here, the information which might be missing or inaccurate is such a small portion of the total that it would have almost no impact on the results.

Nonetheless, while we feel that the information used in this analysis is quite thorough and complete, there are a few points which should be kept in mind as the hospital specific information is being reviewed.

- The information used is billing data and is only as good as the information submitted by hospitals as a part of the payment process. Although there is always a possibility that coding errors are included, the assumption is that hospitals do not make errors on billing forms which ultimately affect payment to them. Likewise, it is assumed that given the link to payment, hospitals have an incentive to submit bills promptly.

- The hospitals included in this analysis are short-term, acute care facilities which were identified by their unique provider number. All facilities which have a zero in the third column of their provider number are by definition participating in Medicare as short-term, acute care facilities. All other facilities--those with something other than a zero in the third column of the provider number--were excluded from the analysis. In some cases, hospital names suggest an orientation different from acute care. This does not mean the facility is inappropriately included in the publication.

- There is some information in the file which does not reflect the results of review by Peer Review Organizations (PROs), the entities charged with reviewing hospital services provided to Medicare beneficiaries. For example, one of the functions a PRO performs is to ensure that the diagnosis assigned to a particular case is accurate. The nature of the review and payment system is such that it is possible for PRO changes in diagnosis assignment not to be submitted to HCFA and associated in the MEDPAR file on as timely a basis as other billing information. Obviously, any major changes in diagnosis assignment which are not reflected in the data base would have a bearing on calculation of mortality rates in individual diagnostic categories and may also have a bearing on the extent to which presence or absence of comorbidities has been reflected accurately.

Some hospitals pointed out instances where the hospital's information did not agree with HCFA's, e.g., different date of death, cases of subsequent admission to another facility, or changes in diagnosis codes. The data base used in this analysis has not been revised to reflect these potential discrepancies. Rather we are examining all hospital comments to ensure that changes to our data systems and processes can be made when warranted so that future releases will be even more accurate. Readers are urged to review any hospital comments with a specific view toward these types of issues.

- The predictive model used in this effort does not explain all variability in outcome. Most notably, a measure of severity of illness has not been included in the model, and therefore, the predictive power of the model is less precise than it would be if such a measure had been available. Nonetheless, the information included in this document does legitimately contribute to the body of information about hospital performance.

New Hampshire

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALICE PECK DAY MEMORIAL HO LE8ANON NH 03766	NH-5	144	8	6-18	14	14	5-48	5	40	5-73	5	20	3-71	5	0	4-72	1	100	2-98	1	0	1-97	23	4	7-40
ANOROSCOGGIN VALLEY HOSPIT BERLIN NH 03570	NH-6 *	687	9	9-17	29	45	14-48	16	38	11-54	11	9	7-56	43	23	14-40	23	26	23-62	9	22	5-58	73	11	13-33
CATHOLIC MEDICAL CENTER MANCHESTER NH 03102	NH-7 *	2208	11	9-16	158	28	22-40	64	17	17-40	39	10	10-37	101	30	16-33	127	36	29-48	24	17	4-36	164	19	12-27
CHESHIRE MEDICAL CENTER KEENE NH 03431	NH-8 *	1443	10	8-15	112	27	13-32	54	24	17-41	19	16	6-43	78	24	14-33	59	29	24-50	27	15	4-35	155	12	12-27
CONCORO HOSPITAL CONCORD NH 03301	NH-9	2353	11	10-16	211	28	18-35	96	24	19-38	36	22	9-36	123	18	16-32	126	34	32-51	38	11	7-34	158	18	13-28
COTTAGE HOSP WOOOSVILLE NH 03785	NH-10 *	364	12	9-18	23	26	12-48	15	47	12-57	11	18	6-55	18	22	9-48	14	21	17-65	9	11	3-55	37	22	8-34
ELLIOT HOSP MANCHESTER NH 03103	NH-11	2020	15	10-17	228	42	21-38	77	22	20-41	33	33	10-40	95	27	16-34	94	44	28-49	21	10	7-44	128	14	13-28
EXETER HOSPITAL, INC. EXETER NH 03833	NH-12	1268	15	10-17	106	40	19-39	64	25	19-42	15	20	5-46	87	26	15-33	43	30	24-53	29	24	7-38	108	21	13-30
FRANKLIN REGIONAL HOSPITAL FRANKLIN NH 03235	NH-13	455	13	9-18	33	33	16-49	20	20	12-50	6	17	3-64	25	20	12-47	15	67	22-69	9	22	2-54	64	11	10-31
FRIS8IE MEM HOSP ROCHESTER NH 03867	NH-14	913	17	9-16	69	51	15-38	41	34	17-45	20	20	6-42	46	22	11-35	48	54	24-52	14	0	5-47	87	28	11-29
HUGGINS HOSPITAL WOLFEBORO NH 03894	NH-15 *	635	11	9-17	47	34	15-42	22	23	14-52	11	0	2-48	27	22	11-43	28	39	23-59	7	0	3-61	77	23	11-30
LAKES REGION GENERAL HOSPI LACONIA NH 03246	NH-16 *	1340	10	9-16	94	23	16-36	68	21	17-40	26	4	6-38	75	16	13-33	64	39	28-53	18	6	2-38	119	15	12-29
LITTLETON HOSP LITTLETON NH 03561	NH-17 *	558	11	8-16	44	39	16-44	16	44	16-60	12	17	6-53	16	6	10-51	33	36	22-55	6	33	7-72	29	3	8-38
MARY HITCHCOCK MEMORIAL HO HANOVER NH 03755	NH-18	2569	10	8-14	245	24	20-36	60	22	16-39	46	24	13-40	70	11	15-35	81	38	25-47	22	14	9-46	105	23	14-32
MEMORIAL HOSPITAL I P ECU NORTH CONWAY NH 03860	NH-19 *	301	15	7-16	20	45	12-51	7	57	7-68	6	33	3-65	18	33	9-47	15	60	17-63	9	22	1-53	25	8	8-40
MONADNOCK COMMUNITY HOSPIT PETER8OROUGH NH 03458	NH-20 *	472	15	10-19	28	43	13-47	25	32	16-51	11	18	3-49	31	13	10-40	27	37	26-62	10	30	8-60	45	36	11-36
NASHUA MEMORIAL HOSPITAL NASHUA NH 03060	NH-21	1126	13	9-16	91	36	18-39	36	36	16-46	20	10	7-43	72	24	13-32	47	30	25-53	19	11	2-38	103	18	10-27
NEW HAMPSHIRE HOSP-MED SUR CONCORD NH 03301	NH-22 *	73	11	1-15	.	.		.	.		.	.		1	100	0-97	.	.		1	100	0-99	.	.	
NEW LONDON HOSP ASSN INC NEW LDNDON NH 03257	NH-23 *	308	10	8-18	18	50	15-57	17	18	12-54	7	0	1-58	20	25	9-45	15	40	18-64	8	0	3-59	27	4	5-34
NEWPORT HOSP NEWPORT NH 03773	NH-24	261	12	8-19	10	60	19-75	14	29	12-58	5	0	2-69	7	29	5-65	8	25	14-74	2	100	2-89	43	9	7-30
PARKLAND MEDICAL CENTER DERRY NH 03038	NH-25 *	441	13	9-18	24	33	14-51	14	29	9-54	11	36	6-55	35	9	11-38	26	38	22-59	17	41	8-49	27	15	7-37
PORTSMDUTH REGIONAL HOSPIT PORTSMDUTH NH 03801	NH-26 *	976	10	9-17	91	25	17-39	39	28	17-46	17	18	5-44	42	19	13-39	40	23	25-56	25	32	8-41	73	25	13-34
SCEVA SPEARE MEM HOSP PLYMOUTH NH 03264	NH-27	316	13	10-20	21	38	13-51	12	33	11-60	7	14	2-59	18	28	12-53	16	50	21-66	4	0	2-75	34	6	10-38
ST JDSEPH HOSPITAL NASHUA NH 03060	NH-28 *	1326	12	9-16	103	31	18-38	38	34	17-46	40	18	7-33	60	28	13-34	65	34	25-49	28	18	6-37	101	20	11-28
UPPER CONNECTICUT VALLEY H COLEBROOK NH 03576	NH-29 *	148	21	11-24	5	40	7-76	4	50	5-79	3	33	6-87	8	75	4-59	8	50	13-72	12	17	12-62	24	29	9-42
VALLEY REGIONAL HOSPITAL CLAREMONT NH 03743	NH-30 *	676	13	9-17	48	33	16-43	18	33	12-53	10	10	3-52	24	25	10-44	32	53	25-59	13	31	7-53	70	20	11-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALICE PECK OAY MEMORIAL HO LEBANON NH 03766	1	0	0-100	1	100	0-97	.	.		1	0	0-100	18	6	0-33	3	0	0-96	.	.		1	100	0-100	10	0	0-56
ANOROSCOGGIN VALLEY HOSPIT BERLIN NH 03570	2	0	3-91	13	23	15-64	19	0	2-34	3	0	0-100	64	2	2-15	23	0	2-29	1	0	0-100	51	2	1-15	34	0	0-19
CATHOLIC MEDICAL CENTER MANCHESTER NH 03102	15	53	15-64	12	17	9-58	45	9	5-25	5	0	0-100	313	4	3-9	67	1	1-15	31	0	0-33	271	5	3-8	114	1	0-7
CHESHIRE MEDICAL CENTER KEENE NH 03431	10	30	5-59	15	20	15-61	46	11	3-22	13	0	0-98	149	7	2-10	46	0	1-19	19	0	0-87	110	2	1-10	95	3	0-8
CONCORO HOSPITAL CONCORO NH 03301	59	24	13-44	9	78	14-72	97	5	4-17	74	0	0-14	224	4	3-10	73	1	1-14	26	0	0-88	160	3	2-9	178	3	1-6
COTTAGE HOSP WOOOSVILLE NH 03785	1	0	1-98	9	67	11-67	7	14	1-57	.	.		52	2	1-15	8	0	0-62	.	.		33	3	1-20	23	0	0-26
ELLIOT HOSP MANCHESTER NH 03103	14	14	7-55	17	18	17-62	71	10	4-19	2	0	0-100	200	6	3-10	88	5	1-13	20	0	0-90	152	3	2-10	126	2	0-7
EXETER HOSPITAL, INC. EXETER NH 03833	8	50	6-65	13	46	11-60	50	4	3-20	3	0	0-100	149	6	2-10	62	5	2-17	16	0	0-100	97	6	2-12	59	5	1-12
FRANKLIN REGIONAL HOSPITAL FRANKLIN NH 03235	1	100	1-97	6	50	10-77	10	10	1-47	3	33	0-100	46	4	2-18	5	40	1-67	5	0	0-100	15	7	0-38	39	3	0-19
FRISBIE MEM HOSP ROCHESTER NH 03867	3	33	1-82	9	89	17-75	34	3	4-27	1	0	0-100	118	5	2-11	36	3	1-21	4	0	0-100	57	12	1-14	32	0	0-24
HUGGINS HOSPITAL WOLFEBORO NH 03894	6	0	3-67	7	0	8-70	24	17	2-29	3	0	0-100	78	3	1-12	31	0	2-24	3	0	0-100	72	3	1-13	22	9	0-36
LAKES REGION GENERAL HOSPI LACONIA NH 03246	6	33	10-77	6	33	11-77	34	12	3-26	6	0	0-100	163	4	3-11	56	0	1-17	12	8	0-55	92	7	2-12	134	1	0-6
LITTLETON HOSP LITTLETON NH 03561	5	0	4-74	5	60	11-82	21	10	1-29	.	.		72	6	2-14	21	0	1-29	9	0	0-99	39	0	1-18	58	0	0-14
MARY HITCHCOCK MEMORIAL HO HANOVER NH 03755	18	6	5-48	3	67	7-89	61	10	4-21	41	2	0-33	160	11	4-12	80	8	1-14	27	0	0-27	313	6	3-8	282	0	0-4
MEMORIAL HOSPITAL I P ECU NORTH CONWAY NH 03860	4	0	1-77	1	0	0-97	4	0	0-83	1	0	0-100	34	0	1-19	9	22	0-53	3	0	0-100	22	9	1-27	18	0	0-38
MONAONOCK COMMUNITY HOSPIT PETERBOROUGH NH 03458	2	100	5-94	3	67	2-82	14	14	1-38	5	0	0-99	55	5	2-17	18	0	1-33	4	0	0-100	32	3	1-21	26	0	0-28
NASHUA MEMORIAL HOSPITAL NASHUA NH 03060	10	50	5-59	8	63	11-70	35	3	3-25	4	0	0-100	118	4	2-11	50	2	1-17	15	0	0-99	71	8	2-13	76	3	0-10
NEW HAMPSHIRE HOSP-MEO SUR CONCORO NH 03301	.	.		.	.		.	.		.	.		.	.		.	.		.	.		1	0	0-100	.	.	
NEW LONDON HOSP ASSN INC NEW LONDON NH 03257	1	0	3-100	3	0	5-86	5	0	1-67	2	0	0-100	34	6	2-22	1	100	0-100	6	0	0-99	21	5	1-27	20	5	0-33
NEWPORT HOSP NEWPORT NH 03773	5	0	3-73	1	0	0-97	5	0	0-68	.	.		50	8	2-17	5	0	0-71	3	0	0-100	13	8	0-40	12	0	0-72
PARKLANO MEDICAL CENTER OERRY NH 03038	3	33	1-82	1	100	0-97	26	8	1-26	.	.		44	7	1-18	13	0	2-42	2	0	0-100	34	0	1-20	32	3	0-20
PORTSMOUTH REGIONAL HOSPIT PORTSMOUTH NH 03801	7	29	3-64	8	50	12-72	28	0	2-27	8	0	0-100	77	1	2-13	56	4	1-16	6	0	0-100	83	0	2-13	47	0	0-15
SCEVA SPEARE MEM HOSP PLYMOUTH NH 03264	1	100	1-97	8	50	12-72	2	50	1-89	3	0	0-100	46	4	2-19	2	0	0-98	3	0	0-100	32	0	1-20	17	18	0-44
ST JOSEPH HOSPITAL NASHUA NH 03060	7	14	7-70	11	55	15-69	37	8	3-24	20	0	0-88	143	5	2-11	42	5	1-19	18	0	0-62	95	8	2-11	86	0	0-9
UPPER CONNECTICUT VALLEY H COLEBROOK NH 03576	4	75	3-77	2	50	5-94	.	.		.	.		10	10	1-46	3	0	0-94	1	0	0-100	9	0	0-55	3	0	0-99
VALLEY REGIONAL HOSPITAL CLAREMONT NH 03743	5	20	8-79	9	33	13-70	16	6	1-35	8	0	0-99	65	8	2-15	40	5	1-20	13	0	0-99	50	2	1-16	48	0	0-14

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall Number of Patients	Overall Actual Mortality Rate/Percent	Overall Range of Predicted Mortality Rate/Percent	High Risk Diagnostic Categories Cancer Number of Patients	Cancer Actual Mortality Rate/Percent	Cancer Range of Predicted Mortality Rate/Percent	Stroke Number of Patients	Stroke Actual Mortality Rate/Percent	Stroke Range of Predicted Mortality Rate/Percent	GI Catastrophes Number of Patients	GI Catastrophes Actual Mortality Rate/Percent	GI Catastrophes Range of Predicted Mortality Rate/Percent	Severe Chronic Heart Disease Number of Patients	Severe Chronic Heart Disease Actual Mortality Rate/Percent	Severe Chronic Heart Disease Range of Predicted Mortality Rate/Percent	Severe Acute Heart Disease Number of Patients	Severe Acute Heart Disease Actual Mortality Rate/Percent	Severe Acute Heart Disease Range of Predicted Mortality Rate/Percent	Metabolic & Electrolyte Disturbances Number of Patients	Metabolic & Electrolyte Disturbances Actual Mortality Rate/Percent	Metabolic & Electrolyte Disturbances Range of Predicted Mortality Rate/Percent	Pulmonary Disease Number of Patients	Pulmonary Disease Actual Mortality Rate/Percent	Pulmonary Disease Range of Predicted Mortality Rate/Percent
WEEKS MEMORIAL HOSPITAL LANCASTER NH 03584	NH-31 *	430	16	10-19	26	46	18-54	28	29	16-49	12	25	3-46	27	22	11-43	19	37	20-62	1	0	0-97	59	29	12-34
WENTWORTH-DOUGLASS HOSPITA DOVER NH 03820	NH-32	1312	12	9-16	105	30	17-37	50	28	17-42	26	15	6-36	90	19	15-33	60	33	26-52	18	28	11-52	89	13	10-27

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
WEEKS MEMORIAL HOSPITAL LANCASTER NH 03584	3	0	4-85	8	25	13-73	3	67	0-83				55	4	1-15	7	0	0-85				20	0	0-28	25	8	0-29
WENTWORTH-DOUGLASS HOSPITA DOVER NH 03820	12	33	6-56	6	83	12-78	35	9	3-25	6	0	0-100	129	9	2-11	46	0	1-18	18	0	0-80	61	7	1-13	107	1	0-7

*Written Comments Not Submitted.

apd
Alice Peck Day Memorial Hospital
125 Mascoma Street, Lebanon, New Hampshire 03766 / 603-448-3121

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Sirs:

The Patient Care Committee of the Alice Peck Day Memorial Hospital (Provider #300016) reviewed the charts of all the deaths to be released by HCFA in December. All deaths were anticipated. Alice Peck Day is a small community Hospital that is within five miles of a large teaching Medical Center. Some of these patients were people who had been referred for terminal care after making a decision not to return for agressive treatment. Alice Peck Day provides comfort and dignity to those patients who require acute hospitalization during the terminal phase of their disease. Also, because of the small data base in a Hospital of this size (32 Acute beds), the release of mortality rates probably does not give the public any indication, either positive or negative, of the quality of care that is provided at Alice Peck Day.

Sincerely,

Lora Kent Smith

Lora Kent Smith
QA Coordinator

Family-centered health care

CONCORD HOSPITAL

250 PLEASANT STREET, CONCORD, N. H. 03301 • 603 225-2711

RICHARD G. WARNER
President

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Medicare #300001

Gentlemen:

These are our comments re: Mortality information for the diagnostic category sepsis:

1. Analysis of variations in mortality rates is not statistically meaningful for such small numbers of patients. Concord Hospital had only nine patients in the sepsis category. It was the smallest subgroup in the entire analysis. It would only be possible to determine whether the mortality rate was unusual if the number of patients treated was 100 or more.

2. The model utilized by HCFA was based on a formula that considered principal diagnosis (reason for hospitalization) and the fact of death. It does not establish a relationship between the cause of death and the principal diagnosis. Careful review of the seven deaths indicates that five actually died from sepsis; one died from renal failure, and another from hepatic coma (12 and 25 days after admission respectively). Actual deaths from septicemia generally occur within the first few days of infection. Thus, if the formula utilized by HCFA had included the actual cause of death, the mortality for sepsis at Concord Hospital was 5/7 or 71%, which is within the expected range.

3. The model utilized fails to consider severity of illness. Six of the seven patients who died had severe and rapidly progressive underlying disease. Three patients had cancer, one had cirrhosis, one had severe lung disease, one had severe heart and lung disease, and another had morbid obesity and was admitted from a nursing home.

Mortality rates should include consideration of the cause of death as well as the principal and underlying reasons for hospitalization, the type of patient who is admitted to the hospital, and the treatment goals of the physician, patient and family (e.g. some patients are admitted for terminal care). Analysis of the mortality for sepsis indicates that with appropriate consideration of these factors, the rates were within the expected limits. In addition, the patients who died had severe underlying disease and, in many cases, aggressive treatment was not attempted. Medical review of these cases does not indicate any problems in the management of sepsis at Concord Hospital.

Yours truly,

Richard G. Warner

Richard G. Warner

/lnb

Elliot Hospital

Excellence
Caring
Innovation

Office of the President
955 Auburn Street
Manchester, NH 03103
(603) 669-5300

October 27, 1987

FEDERAL EXPRESS

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

The Health Care Financing Administration Mortality Study seriously misrepresents the Elliot Hospital's overall and cancer specific mortality rates and should not be considered a reflection of the quality of care provided by the Elliot Hospital. Initially, we will outline our concerns with the hospital-specific data and subsequently, focus on our concerns with the methodology employed.

The Elliot Hospital conducted a thorough review of their 1986 patient records and concluded that the HCFA study has over stated their overall mortality rate. In 1986, Elliot Hospital's entire patient population mortality rate was 3.2%; the Medicare patient population experienced a higher rate of 9%. Obviously, the vast percentage of our deaths occur in the Medicare population and the HCFA data misrepresents Elliot Hospital's overall mortality experience.

A review of the 10 high risk and 6 low risk groupings reveals that the Elliot Hospital is well within the predicted range in all but one category. The Elliot Hospital has a very large, active medical oncology service as well as the largest radiotherapy program in northern New England. As a result, the Elliot Hospital cares for a disproportionate number of cancer patients, as compared to other New Hampshire hospitals. Additionally, the Elliot Hospital's Hospice Program admits many patients for terminal care each year. We reviewed the 96 cancer deaths identified by the HCFA study and found that 52 (42%) of the patients were admitted for palliative care, had a "do not resuscitate" order written on the admission form, and/or expired after discharge. Obviously, the inclusion of these deaths in the cancer mortality rate calculation results in a misleading figure. An appropriate calculation would consider the number of anticipated deaths and result in a more realistic figure of 25%. This belief is supported by New Hampshire state statistics which indicate that the Elliot Hospital had a Medicare cancer mortality rate of 27%, (73 of 273 Medicare deaths were cancer related). Again, we feel very strongly that the HCFA mortality rate does not accurately represent the quality of care provided by the Elliot Hospital.

Affiliated with the Health NorthEast family of healthcare companies.

Almost one third (654 cases) of the patients reviewed by HCFA did not fall into one of the sixteen major categories. This group, which had the second highest number of deaths, had a significant number of radiation therapy patients. Radiation therapy patients are only admitted when they are too sick to receive treatment on an ambulatory basis. Therefore, it is not surprising that this group had a significant number of patients who had been admitted with an extremely poor prognosis. Again, the inclusion of this patient population into the mortality rate calculation results in a less than meaningful figure.

The Elliot Hospital has also identified four major methodological flaws which resulted in a misrepresentation of their quality of care: 1) 21% of the patients identified were admitted for palliative or hospice care and/or had a "do not resuscitate" order written on admission; 2) 13% of the patients died after discharge from the hospital raising the question that the patient may have expired from something unrelated to his discharge diagnosis; 3) 10% of the patients had a discrepancy between the principle diagnosis identified by HCFA and the actual cause of death as recorded on the death certificate; 4) the study focused on a select group of patients with an average age of 73 making it difficult to conceive that the experience could be translated to the population as a whole.

Below we have outlined our general comments regarding the HCFA methodology. The Elliot Hospital would like to make it very clear that, based upon a review of our hospital-specific data, we do not believe that there is any relationship between quality of care and the mortality statistics presented in this study. We believe that a sophisticated study of overall hospital mortality rates could provide some insight to the quality of care in an institution. However, the HCFA study is anything but sophisticated, confines itself to a subset of very old, very sick patients who are being admitted for palliative and terminal care. The HCFA study should not be considered an indicator of quality for the following reasons:

1. By HCFA's own admission, this data has not been adjusted for severity of illness which is a serious methodological flaw. Consequently, hospitals which earn a superior reputation, and attract and treat the severely ill risk a higher than average mortality rate;

2. The study is based upon a very old and sick patient population which does not represent the general population. Moreover, the numbers of patients in certain subgroups are so small, (less than 20 patients) the accuracy of the results must be questioned;

3. The data includes deaths which occurred within 30 days after discharge from the hospital. This raises the question of the number of deaths which were unrelated to the hospitalization; and

4. Despite our attempt to seek further clarification on the methodology used, (see attached letter which remains unanswered), we are unclear as to how the diagnostic groupings were assigned to the various risk categories. We believe, as many other institutions do, that the predicted rate should be wider than those used in the present study.

In summary, it is our feeling that while HCFA may have had the best of intentions in choosing to release this material, their methodology is open to question and the overall validity of this study concerns us. We would like to emphasize that there is a case for mortality rates as a measure of quality but it will require an extremely sophisticated system which deals with the entire hospital population and adjusts for severity of illness.

Thank you for the opportunity to comment.

Sincerely yours,

Francis J. Cronin
Francis J. Cronin
President

Samuel C. May
Samuel C. May, M.D.
Vice President for Medical Affairs

dps

EH Exeter Hospital, Inc.
10 buzell avenue, exeter, n.h. 03833
603-778-7311

October 27, 1987

Mr. Harvey Brooks
Health Standards & Quality Bureau
6300 Security Boulevard
Meadows East Building
Room 202
Baltimore, MD 21202

RE: Medicare Provider # 300023

Dear Mr. Brooks:

The Exeter Hospital would like to take this opportunity to address our specific concerns relative to the HCFA publication of mortality data. While we acknowledge that this type of statistical information may be of some use to the health care provider community in identifying areas for further analysis, we would have serious reservations if it is suggested that presentation of this type of "raw" data can be utilized by either individual consumers or any group or organization to draw conclusions relative to the quality of care rendered by individual health care providers. Although we have several areas of concern, in the interest of brevity, we will limit our comments to what we feel are the two major variances in the data.

First and foremost is the lack of a severity of illness adjustment in the HCFA methodology. One striking example of this is in the cancer mortality rate of 40% calculated for our facility. The conclusion which could be incorrectly drawn from the limited data presented is that all patients that carry the diagnoses included in the cancer patient group are included in the statistics, when in fact the number of cancer patients actually treated is much higher and the vast majority of cancer patients are treated in the outpatient setting. These patients, in fact, are not included in the statistics. In addition, because of the hospital's "high tech" approach to treating cancer patients on an outpatient basis, it is usually patients who are in the advanced stages of disease that are actually admitted to the inpatient setting for treatment. In fact, of the 106 cases considered in our statistics, 97.6% were admitted with either advanced or metastatic disease and 87% of the patients were expected deaths at the time of admission. Sixty-four percent (64%) were admitted specifically for palliative care. Clearly, the failure of HCFA's methodology to allow for inclusion of this type of information does not allow for a "true" or accurate interpretation of the data.

We would further like to note that the Hospital's Cancer Program, which is approved and monitored by the American College of Surgeons, has maintained a cancer registry for approximately thirteen

(13) years which shows our cancer survival statistics to be consistently equal to or better than the national average.

We would suggest that if this type of data publication is to be used as a means of general information, it would be most appropriately presented along with complete patient treatment data and perhaps cancer survival rates for the facility to provide a more accurate picture. Hospitals who do not offer "high tech" outpatient cancer services would actually look better in the final analysis, as they would have a much higher volume of patient cases included in their data base and end up with a lower mortality rate.

Our second concern deals with the limitation of the model in that it has not been validated. The ability of the HCFA model to detect actual differences in quality of care has never been established. We would suggest that only a review of specific information in the patient's medical record would allow an informed decision to be made relative to quality of patient care.

We would strongly urge that a complete and detailed explanation of how the mortality data was compiled, as well as the known limitations of the data, be published along with the release so as to prevent any undue concern or apprehension on the part of the Medicare population as they attempt to put this information into perspective.

The Exeter Hospital administration and staff wish to make clear their enthusiasm for factual, useable data or information that might assist the health care provider in evaluating the quality of care within their facilities, as well as aid consumers to make informed health care decisions. It is our considered opinion, however, that the data release as proposed by HCFA does not fulfill either goal, and reaffirm that the mortality data as presented does not serve this purpose.

Respectfully submitted,

Barbara Grillo

Barbara Grillo
Executive Director

Paul Gustavson, M.D.
Chairman, Quality Assurance Board

BG/kb

cc: David B. Donsker, M.D.
President of Medical Staff

Franklin Regional Hospital
15 AIKEN AVENUE FRANKLIN, NH 03235 (603) 934-2060

H. Rudolph Wirth
Executive Director

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RE: HCFA Mortality Study
Medicare Provider #30013

Dear Dr. Roper:

We have completed a review of the HCFA Mortality Study as pertains to Franklin Regional Hospital. Due to the high mortality rate indicated for the diagnostic category "Severe Acute Heart Disease" (HS), this category was studied in detail. We discovered that the total number of patients admitted with the principal code numbers specified in this category was twenty (20), not fifteen (15) as stated in your report. Only the patients' last admission was counted as in the report's calculations. This would cause a substantial decrease of 17% in our mortality for this cateogry, from 67% to 50%.

	Diagnostic Category	Cases	Actual Mortality Rate	Range of Predicted Mortality Rates
HCFA Report	HS	15	67%	22 to 69%
Franklin Regional Hospital Audit	HS	20	50%	22 to 69%

Needless to say that this discrepancy casts serious doubts in our minds on the reliability of the entire report.

In addition, we feel that the practice of excluding patients "other" admissions for the year distorts the mortality rate to the detriment of our facility. The potential for death exists during every hospital stay, therefore, it does not seem justifiable to exclude any admissions.

"SERVICE FOR HUMANITY"

Your consideration of these comments will be very much appreciated in addition to the correction of HCFA's inaccurate mortality data as pertains to Franklin Regional Hospital.

Sincerely,

H. Rudolph Wirth
Executive Director

aes

Frisbie Memorial Hospital
Whitehall Road
Rochester, New Hampshire 03867
Tel.: 603/332-5211

October 26, 1987

HCFA
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, MD 21207

Dear Sir:

We appreciate the opportunity you have given us to review and comment on this facility's mortality data prior to its publication in December.

In order to further clarify the data, we have included our analysis of the report.

Should you find additional information necessary, please feel free to contact me.

Sincerely,

Jeffrey G. White /pm

Jeffrey G. White
Executive Vice President

/pm

Frisbie Memorial Hospital
Whitehall Road
Rochester, New Hampshire 03867
Tel.: 603/332-5211

Frisbie Memorial Hospital (30-00-14) in Rochester,N.H. is a 122 bed acute care, not-for-profit, JCAH accredited facility which provides a wide range of health care services to a population of approximately 93,000 within 12 surrounding communities.

Providing quality care is a fundamental mission of this institution whose medical and allied professional staffs routinely monitor the quality of patient care. The quality assurance review process utilized by these professionals includes the ongoing monitoring through the review of deaths, selected readmissions, nosocomial infections, in-hospital accidents, surgical complications, tissue diagnosis, transfusions, adverse drug reactions, and others. HCFA's publication of mortality rates provides FMH another source of data to assist in its continuous evaluation of patient care.

Preliminary review of the HCFA data reveals three observations:

1. 62% of all patients studied were over age 75 and 43% over age 80. Patients in these age groups, with cancer, would be expected to have a higher mortality rate. Studies of regional cancer rates show that Frisbie Memorial Hospital's service area has an incidence of cancer higher than state and national averages. This would also increase the mortality rate and may be due to environmental and/or occupational factors yet to be identified. Some of the cancers with higher incidence in the local area include undifferentiated small cancer of the lung, colon cancer and malignant lymphoma. These are highly lethal tumors and shorten the overall "expected" survival rate.

   Patients with malignancies are often referred to tertiary medical centers for treatment. When medical or surgical options have been exhausted, some patients may be referred back home for "terminal care." The community hospital offers this supportive care and thus accepts the eventual death as one of its statistics.

2. Of the 151 deaths listed, 32 of the patients died elsewhere, within 30 days after admission as follows:

9	Intermediate care facilities
5	Home with Visiting Nurse Association supports
6	Skilled nursing facilities
8	Home with no further need for followup
1	Against medical advice
3	Short term hospitals.

In reviewing the data it should be noted that these (32) cases represent discharges based on established professionally-accepted criteria for discharge. Also, the discharges to the designated settings were based on the resolution or intensity of illness and such placements were made to ensure continuity of care.

HCFA's method of reporting deaths within 30 days of a patient's admission may be too protracted a factor to associate the risk and occurrence of a patient's death with the care provided by the hospital, as well as other co-existing causes of death have not been considered.

3. Frisbie Memorial Hospital's breakdown of mortality statistics by age is as follows:

45 - 64	4
65 - 69	20
70 - 74	32
75 - 79	29
80 - 84	29
85 - 89	25
90+	12
TOTAL	151

These figures correlate with the average life expectancy based on 1984 figures which is 71 for males and 78 for females.

Although Frisbie Memorial Hospital plans to use the data as a rudimentary measure of quality, as well as a tool to examine the practice patterns in our facility, we can not equate our death rate as a measure of the quality of care since this calculation does not account for the intensity or severity of the patient's illness, as well as other important factors.

DARTMOUTH-HITCHCOCK MEDICAL CENTER Hanover, New Hampshire 03756 603/646-5347

Dartmouth Medical School • Hitchcock Clinic • Hitchcock Foundation • Mary Hitchcock Memorial Hospital
Norris Cotton Cancer Center • Veterans Administration Hospital

Office of the Medical Director

October 21, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Doctor Roper:

Thank you for the opportunity to review our predicted and actual mortality rates prior to publication. We appreciate the information you have provided to us on our patients who died within 30 days after discharge and feel this will be useful to us in our internal quality review activities.

It is not possible for us to draw any conclusions from this information. To do that requires careful review of the severity of the disease for which each patient was hospitalized, treatments used and the patient's response to the treatments, as well as identification of complications from the disease and from the treatment. As an academic medical center, we are committed to providing high-quality care and to carefully evaluating our practices and outcomes, as well as to investigating new therapies to extend and improve life.

In your quest to examine quality in hospitals, we ask you to consider the quality of life that is prolonged. We feel that we have an obligation to let our patients know what they can expect from their disease as it progresses and what they can expect from the treatment that is available to them. Only in this way can the patient, the patient's family and the patient's physician make the decisions that are best for the patient.

Sincerely,

Howard M. Rawnsley, M.D.
Medical Director
Dartmouth-Hitchcock Medical Center

NASHUA MEMORIAL HOSPITAL
COMMENT
MEDICARE MORTALITY DATA FOR 1986

SUMMARY

Nashua Memorial Hospital (NMH) is briefly described with respect to its services and the pattern of local hospital utilization. Although NMH mortality data is within the predicted range for all diagnostic categories, a review of cancer deaths was performed. Three-fourths of the patients in question were terminally ill or at high risk at the time of admission.

Although the HCFA-reported mortality rates are gratifying for Nashua Memorial Hospital, they may not be meaningful because of limitations in the underlying data.

DESCRIPTION OF NASHUA MEMORIAL HOSPITAL

Nashua Memorial Hospital is a 188-bed non-profit community hospital located in Nashua, New Hampshire. For hospitals of this size and type, NMH offers a comprehensive range of services including Same Day Surgery, a Level II Plus Nursery for the care of high-risk infants, an Emergency Department staffed by full time Board Certified physicians and a Mental Health Unit. In 1986, NMH had 62% of local emergency admissions.

The service area has a smaller proportion of people over the age of 65 than the national average. In 1986, half of the admissions to NMH were from the Nashua residents. Hospital use rate for Nashua residents is two-thirds that for Manchester and half that of Massachusetts.

The implication of this range of services and these hospitalization patterns is that NMH is serving an acutely ill population with no indication of unnecessary admissions.

RELEASE OF MORTALITY DATA

Nashua Memorial Hospital applauds the goal of the Health Care Finance Administration to provide information to assist the public in estimating the quality of hospital care. No method yet exists to do this. The mortality data described here is a starting point for discussion with concerned parties rather than a measure of quality itself.

NASHUA MEMORIAL HOSPITAL MORTALITY DATA

For 1986, rates in all diagnostic categories at NMH were within the predicted range of mortality. The accuracy of the reported data was verified by an internal review and no discrepency between hospital medical records data and HCFA reported data was found.

As a further step, Quality Assurance staff reviewed all deaths in the one diagnostic category (cancer) where the number of cases was large enough establish a reliable sample and where the number of deaths was above the middle of the predicted range. Of the 33 deaths in this category, 18 were of patients who were receiving terminal care upon admission, six additional patients had three or more concurrent illnesses and one additional patient had more than three hospitalizations in the last year of life. The average age of the patients in this group was 75.

COMMENT

While reported results for Nashua Memorial Hospital are gratifying, they are not necessarily meaningful because of the limits of the underlying data on which the HCFA analysis is based. The approach used to generate this report does not account for severity of illness and the HCFA analytic model has not been validated. Nashua Memorial Hospital believes that effective quality assurance must operate at the level of the individual patient. This is the only level which can take into account both clinical treatment and the nature of the illness being treated to assess the quality of care provided.

Newport Hospital

167 Summer Street
Newport, New Hampshire 03773
(603) 863-1123

INTON G. COOPER, F.R.S.H., F.A.A.M.A.
PRESIDENT

October 27, 1987

William L. Roper, M.D.
Administrator
HCFA
Hospital Mortality Information
Baltimore, Maryland 21207

Provider Number - 300002

Dear. Mr. Roper:

RE: DEATH RATES

I have attached a copy of your letter from September 21, 1987. The copy contains the corrections that should be corrected on your part. Although the errors do not reflect on the overall mortality rate for Newport Hospital, it does bring up a couple of questions.

Our computer was relatively new in 1986. Now all terminals are locked out of Medical Records information where the final diagnoses are entered. However, in 1986, this field was accessible by many people. Because of this accessibility errors were being made on the Final Diagnosis being sent on the UB-82. What essentially happened, was the admission diagnosis was being processed as the final diagnosis. The errors were corrected on the UB-82 with bills being resubmitted and the PRO also resubmitted.

My question is; it looks as though in four (4) particular cases the error never reached the point where they were entered on this report. Does HCFA correct any errors and at what point?

Secondly, if a patient is transferred from one acute care facility to another which hospital's statistics do you put that death?

My third question is why did you not include a category for reason for death?

I will await a reply either from you directly our from someone at your office.

Sincerely,

Roselene M'Gary ART

Roselene McGary, ART
Director
Medical Record Department
Newport Hopsital

enc.

SSMH

To: Health Care Financing Administration
Health Standards and Quality Bureau

From: David L. Pearse
Administrator

Re: Hospital Mortality Information

Date: October 22, 1987

We received the 1986 mortality data for our hospital in September. We have studied the data and appreciate the opportunity to comment before it becomes public knowledge in December 1987.

In the process of studying this data, we discovered not only some factual errors but also some inherent misinformation in your system of reporting it. Below are the six categories of errors/misinformation.

- Factual errors regarding two patients:

  1) Medicare #[redacted]
  Date of death listed as 4-30-86
  Actual date of death was 4-26-86

  2) Medicare #[redacted]
  This patient should not be part of these statistics because the admission listed for 12-19 to 12-20-86 was subsequently billed as outpatient care. The admission prior to that was 10-19 to 10-28-86; and since the date of death was 1-15-87, this patient did not qualify for this study and should be deleted.

- The cause of death is not necessarily the same as the principal diagnosis which occasioned the admission to the hospital. In four of our cases (10%), the cause of death was indeed different from the principal diagnosis and was not directly related to or a complication of the reason for admission.

- The study assumes that patients who died within 30 days of discharge from the hospital died from the disease that occasioned their last admission. The absence of the actual cause of death in the study will lead the public to erroneous assumptions. Eight of our patients in the study (20%) are in this category.

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- The study ignores admissions in January 1987 when a patient's death occurred within 30 days of a 1986 discharge. The cause for readmission in January 1987 was not necessarily the same as the principal diagnosis listed for the 1986 admission. We had two such cases (5%).

- Statistics for small hospitals are skewed due to a limited, less random data base. The study shows 100% mortality rate for our hospital in the renal disease category based on only one admission with subsequent death. This statistic could cause much unfounded concern to the general public.

- Hospitals which have a Swing-Bed program will show a higher death rate because of frequent admissions at this level for terminal care. The study for our hospital reflects five deaths in this category (12%).

WENTWORTH-DOUGLASS HOSPITAL

October 26, 1987

Medicare Provider #30-0018

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Wentworth-Douglass Hospital (WDH) has completed its review of the mortality information sent to us by the Health Care Financing Administration (HCFA). Our comments are as follows:

1. It should be noted that the information contained in the HCFA document deals only with elderly patients insured by Medicare. The mortality rates listed are not in any way reflective of Wentworth-Douglass Hospital's overall mortality rate, or of its mortality rates for all patients treated within the listed diagnostic categories.

2. All of the cancer patients listed were known to be in the terminal stages of their disease when they were discharged. Furthermore, four (4) of the patients had other potentially lethal, potentially recurring, conditions for which they were hospitalized, i.e. acute myocardial infarction with cardiac arrest on admission, or acute respiratory failure, etc.. It is possible, indeed likely, that these patients' deaths were the result of other, more immediate, causes than cancer.

3. Sepsis was the only diagnostic category for which the hospital's actual mortality rate was higher than HCFA's predicted range. Due to the low number of patients in this group, six with five deaths, it is not felt that this comparison is statistically significant. Moreover, of the five patients who died, four had diagnoses were the causes of the sepsis and should have been listed as the primary diagnoses, i.e. pulmonary cancer with collapsed lung, overwhelming UTI, myeloproliferative disease and obstructive jaundice.

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It is felt that, in spite of the fact that this hospital compares quite favorably to the HCFA established ranges, there remains a significant potential for confusion and misinterpretation upon the general release of the report in December. It is strongly urged that better analytic methodologies and data validation techniques be developed prior to any future releases of this type of report.

Sincerely,

Warren Tessler
Associate Director

New Jersey

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALEXIAN BROTHERS HOSPITAL ELIZABETH NJ 07206	NJ-9	1305	11	9-16	74	24	19-42	49	24	17-42	29	10	6-35	89	22	16-34	30	37	22-56	38	21	8-36	91	16	13-31
ATLANTIC CITY HOSP ATLANTIC CITY NJ 08401	NJ-10 *	3223	14	11-17	286	26	21-36	156	35	21-37	78	15	13-34	253	20	17-29	177	38	30-46	69	20	11-34	165	23	14-29
BARNERT MEMORIAL HOSP CENT PATERSON NJ 07514	NJ-11 *	1211	10	8-15	68	22	16-39	52	17	17-42	15	20	4-44	80	16	14-33	40	40	24-55	33	30	7-36	80	26	12-31
BAYONNE HOSP OISPENSARY BAYONNE NJ 07002	NJ-12	2246	10	10-16	148	24	17-35	108	21	19-37	54	24	10-34	176	17	18-32	89	30	27-49	69	23	15-39	200	16	12-25
BAYSHORE COMMUNITY HOSP HOLMOEL NJ 07733	NJ-13	1897	15	10-17	141	28	16-34	88	27	20-40	33	36	12-42	160	24	16-31	74	49	28-51	58	28	8-32	188	19	13-27
BERGEN PINES CO HOSP PARAMUS NJ 07652	NJ-14 *	825	13	5-12	21	19	8-44	9	22	8-63	14	21	2-42	25	36	10-42	19	37	20-62	30	37	6-36	99	22	11-28
BERGEN PINES CO HOSP/PSYCH PARAMUS NJ 07652	NJ-15 *	1	0	0-99	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BETH ISRAEL HOSP PASSAIC NJ 07055	NJ-16	1669	15	10-17	168	32	18-36	59	22	18-42	24	17	8-41	88	22	17-36	62	50	28-53	37	38	10-39	109	27	15-33
BRIOGETON HOSP BRIOGETON NJ 08302	NJ-17	1484	13	9-16	84	31	21-43	49	31	18-43	29	24	9-40	94	20	14-31	56	50	27-53	32	19	12-45	119	19	11-27
BUROETE TOMLIN MEMORIAL HO CAPE MAY COURT HOUSE NJ 08210	NJ-18	2305	16	12-18	161	37	20-38	138	28	20-36	71	17	8-28	177	22	17-31	135	24	29-48	86	16	9-30	156	21	15-30
CHILTON MEMORIAL HOSP POMPTON PLAINS NJ 07444	NJ-19	1834	15	7-14	144	18	9-26	89	30	17-37	41	22	5-29	102	25	12-29	67	34	24-48	44	41	6-31	149	34	13-28
CHRIST HOSP JERSEY CITY NJ 07306	NJ-20	2194	11	10-17	291	24	20-36	71	35	20-42	35	9	6-32	133	22	16-32	57	58	27-53	42	24	9-36	156	10	12-27
CLARA MAASS MEMORIAL HOSP BELLEVILLE NJ 07109	NJ-21	3114	12	9-15	264	34	21-37	110	25	20-39	66	21	8-29	189	21	16-29	112	48	29-49	63	46	13-38	214	11	12-25
COLUMBUS HOSP NEWARK NJ 07107	NJ-22	1009	11	8-15	62	35	15-40	37	24	17-47	15	13	3-42	82	24	14-33	34	29	21-54	14	14	6-50	78	15	9-27
COMMUNITY MEMORIAL HOSP TOMS RIVER NJ 08753	NJ-23	5904	15	11-17	630	22	18-31	247	28	21-34	142	20	12-29	413	26	18-28	246	35	30-45	177	42	18-37	381	21	16-27
COOPER HOSP/UNIVERSITY MEO CAMDEN NJ 08103	NJ-24	2619	15	9-16	330	28	21-36	77	29	17-37	64	20	7-28	126	18	15-30	90	37	26-48	42	38	9-36	164	28	11-25
OEBORAH HEART LUNG CENTER BROWNS MILLS NJ 08015	NJ-25	1111	7	5-11	30	3	13-46	.	.		1	0	0-97	43	21	12-38	16	13	15-59	1	0	0-98	61	7	8-28
DOVER GENERAL HOSP OOVER NJ 07801	NJ-26	1827	13	10-17	180	28	20-38	77	21	19-40	34	21	9-37	89	28	13-31	100	40	27-48	29	24	13-47	147	15	13-28
EAST ORANGE GENERAL HOSP EAST ORANGE NJ 07018	NJ-27	1124	12	8-15	48	25	13-40	57	25	16-40	14	21	3-43	92	18	15-33	15	33	18-64	44	18	8-34	68	19	12-32
ELIZABETH GENERAL HOSP OIS ELIZABETH NJ 07201	NJ-28	1711	14	10-16	157	23	19-37	75	35	19-40	29	28	6-35	121	28	16-32	54	41	26-53	36	31	11-41	106	28	13-31
ELMER COMMUNITY HOSP ELMER NJ 08318	NJ-29	754	13	9-17	41	22	14-42	53	26	15-40	9	11	3-55	64	28	12-33	35	46	25-57	16	13	5-45	48	27	10-34
ENGLEWOOO HOSP ASSOCIATION ENGLEWOOO NJ 07631	NJ-30	4021	11	6-13	406	29	10-24	154	28	18-33	103	14	5-21	220	18	15-27	166	36	28-45	56	13	5-27	280	16	10-22
FREEHOLO AREA HOSP FREEHOLO NJ 07728	NJ-31	2071	13	9-16	147	25	16-34	86	31	19-39	34	21	6-34	117	20	15-31	87	33	27-49	52	27	10-35	176	23	13-28
GREENVILLE HOSP JERSEY CITY NJ 07305	NJ-32 *	622	9	8-15	32	19	15-48	24	25	15-51	14	21	6-48	47	15	11-34	11	0	12-64	14	29	10-55	64	19	10-31
HACKENSACK HOSP ASSOCIATIO HACKENSACK NJ 07601	NJ-33	4308	13	10-16	396	23	19-33	181	25	22-37	103	15	11-30	260	25	16-28	188	40	31-47	85	31	14-36	264	23	15-28
HACKETTSTOWN COMMUNITY HOS HACKETTSTOWN NJ 07840	NJ-34	753	14	10-18	51	20	16-42	43	33	16-43	20	20	7-43	41	20	12-38	43	33	25-55	22	18	8-45	82	23	11-30

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Dphthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Drlhopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALEXIAN BROTHERS HOSPITAL ELIZABETH NJ 07206	18	22	10-54	17	29	15-59	13	0	1-40	9	0	0-100	173	5	3-10	51	4	1-17	10	0	0-86	141	6	2-10	96	1	0-8
ATLANTIC CITY HOSP ATLANTIC CITY NJ 08401	21	33	15-59	25	44	21-60	101	7	5-18	19	5	0-90	287	6	3-9	148	9	2-12	25	0	0-57	312	3	3-8	144	1	0-6
BARNERT MEMDRIAL HDSP CENT PATERSON NJ 07514	10	30	8-64	3	100	5-86	21	0	2-31	8	0	0-99	127	8	2-10	63	6	1-15	7	0	0-100	117	3	2-10	77	0	0-9
BAYDNNE HOSP DISPENSARY BAYONNE NJ 07002	11	9	7-60	14	29	15-63	50	6	3-22	22	0	0-75	225	3	3-9	102	4	2-14	8	0	0-100	212	0	2-9	102	2	1-8
BAYSHORE COMMUNITY HDSP HDLMOEL NJ 07733	23	35	8-48	20	30	18-61	56	9	5-23	8	0	0-99	186	5	2-10	106	6	2-13	9	0	0-96	189	4	3-9	80	3	0-9
BERGEN PINES CO HOSP PARAMUS NJ 07652	1	100	0-97	4	25	6-81	19	11	1-31	8	0	0-100	24	0	0-25	47	17	2-19	1	0	0-100	65	9	1-13	10	0	0-88
BERGEN PINES CO HOSP/PSYCH PARAMUS NJ 07652	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BETH ISRAEL HOSP PASSAIC NJ 07055	5	0	6-76	14	29	20-69	30	7	4-29	30	0	0-61	166	8	4-12	109	6	2-13	9	0	0-99	171	6	2-10	79	4	0-9
BRIDGETDN HOSP BRIDGETON NJ 08302	13	31	6-55	12	17	14-65	22	9	3-32	4	0	0-100	137	11	2-11	89	7	2-14	11	0	0-100	139	6	2-10	97	0	0-8
BUROETE TOMLIN MEMDRIAL HD CAPE MAY COURT HDUSE NJ 08210	15	27	6-53	57	39	26-55	66	6	3-19	7	0	0-100	228	8	3-10	119	9	3-15	11	9	0-98	178	7	2-9	99	1	0-8
CHILTON MEMDRIAL HOSP POMPTON PLAINS NJ 07444	9	56	4-60	34	53	17-50	69	1	2-16	15	0	0-94	168	10	2-9	111	7	1-12	16	6	0-100	122	9	1-9	95	0	0-8
CHRIST HDSP JERSEY CITY NJ 07306	20	20	12-55	15	47	17-65	39	8	3-24	9	0	0-99	241	4	3-10	152	1	2-12	16	6	0-34	189	4	2-9	109	5	0-7
CLARA MAASS MEMORIAL HOSP BELLEVILLE NJ 07109	25	36	12-52	11	45	15-68	57	2	4-22	94	0	0-9	327	5	3-9	121	1	1-12	16	0	0-41	307	4	3-8	221	3	0-5
COLUMBUS HDSP NEWARK NJ 07107	10	30	8-63	4	25	6-80	10	10	1-47	6	0	0-100	97	8	3-13	49	4	1-17	4	0	0-100	115	2	1-10	107	2	0-8
COMMUNITY MEMORIAL HOSP TOMS RIVER NJ 08753	40	25	13-48	68	40	23-50	148	10	6-18	9	0	0-100	702	5	3-8	366	6	2-10	38	0	0-59	500	6	3-7	225	3	1-6
COOPER HDSP/UNIVERSITY MED CAMDEN NJ 08103	20	25	8-51	22	64	19-60	53	15	4-23	18	6	0-78	231	5	3-10	127	11	2-13	21	0	0-86	354	7	3-8	87	1	0-9
DEBDRAH HEART LUNG CENTER BRDWNS MILLS NJ 08015	1	0	0-98	1	100	3-99	.			.	.		5	0	0-75	1	0	0-100	.	.		638	8	3-7	2	0	0-100
DDVER GENERAL HOSP DDVER NJ 07801	18	22	10-54	17	24	16-61	34	6	2-24	14	0	0-94	195	8	3-11	83	0	1-14	11	0	0-100	132	3	2-11	115	0	0-7
EAST DRANGE GENERAL HOSP EAST DRANGE NJ 07018	10	20	9-65	30	40	19-55	12	17	2-43	3	33	0-100	86	6	3-14	46	2	1-18	4	0	0-78	122	7	2-10	32	3	0-24
ELIZABETH GENERAL HOSP DIS ELIZABETH NJ 07201	10	10	8-63	37	43	24-58	38	5	3-24	9	0	0-99	154	7	2-11	65	5	1-15	13	0	0-98	138	4	2-10	82	1	0-9
ELMER COMMUNITY HOSP ELMER NJ 08318	3	33	0-83	4	75	7-82	12	0	1-42	3	0	0-100	82	2	2-13	51	8	3-20	7	0	0-100	75	3	1-13	46	2	0-15
ENGLEWOOD HDSP ASSOCIATION ENGLEWOOD NJ 07631	25	32	7-46	31	48	16-50	104	7	2-14	154	0	0-7	429	4	1-6	189	4	1-10	35	0	0-77	316	5	1-6	194	3	0-5
FREEHOLD AREA HDSP FREEHDLD NJ 07728	14	14	9-58	30	40	21-57	56	11	3-20	10	0	0-97	217	5	3-9	93	6	1-13	12	0	0-100	202	5	2-9	131	5	0-7
GREENVILLE HOSP JERSEY CITY NJ 07305	4	0	1-76	.	.		7	0	2-58	10	0	0-99	64	0	2-14	33	9	1-22	1	0	0-100	98	2	2-11	28	0	0-31
HACKENSACK HOSP ASSOCIATIO HACKENSACK NJ 07601	26	38	11-51	27	37	26-64	106	14	4-17	65	0	0-12	389	6	3-9	213	7	2-11	40	5	0-27	690	6	3-7	214	1	1-5
HACKETTSTDWN CDMMUNITY HOS HACKETTSTDWN NJ 07840	4	25	3-77	4	25	6-81	19	11	2-34	5	0	0-100	70	10	2-15	33	0	1-22	7	0	0-100	44	5	1-17	36	0	0-18

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																					
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAMILTON HOSP TRENTON NJ 08609	NJ-35	1397	13	10-17	82	26	17-39	72	35	21-43	23	17	9-44	101	21	14-31	57	32	23-49	29	24	11-44	113	25	15-32
HELENE FULD MEDICAL CENTER TRENTON NJ 08638	NJ-36	1965	10	9-15	114	20	15-34	67	21	18-40	34	15	9-37	126	18	14-29	87	33	25-47	36	19	9-38	132	22	12-28
HOLY NAME HOSP TEANECK NJ 07666	NJ-37	3030	12	9-16	249	24	17-33	118	32	21-38	60	18	11-34	171	23	17-31	108	45	31-51	65	31	13-37	212	18	13-26
HOSP CENTER AT ORANGE ORANGE NJ 07050	NJ-38 *	1288	10	8-15	106	27	18-38	68	24	17-39	17	18	4-41	92	18	13-31	29	34	21-55	31	26	7-37	92	14	11-29
HUNTERDON MEDICAL CENTER FLEMINGTON NJ 08822	NJ-39	1227	15	10-18	129	17	15-34	62	29	18-41	26	31	8-40	47	21	12-37	42	29	25-55	24	25	14-51	128	31	17-33
IRVINGTON GENERAL HOSP IRVINGTON NJ 07111	NJ-40	997	12	9-17	67	25	17-40	50	34	17-43	21	5	4-37	70	23	14-35	23	57	23-62	25	8	8-43	92	18	15-34
JERSEY CITY MEDICAL CENTER JERSEY CITY NJ 07304	NJ-41	1036	17	10-17	38	39	12-40	53	26	15-39	24	42	7-41	80	13	13-32	55	42	28-55	35	14	5-33	94	26	11-29
JERSEY SHORE MEDICAL CENTE NEPTUNE NJ 07753	NJ-42	3439	15	9-16	318	22	16-30	133	30	21-38	68	28	9-31	193	25	16-29	162	41	31-48	97	28	9-29	263	24	15-28
JOHN F KENNEDY MEDICAL CEN EDISON NJ 08817	NJ-43 *	2793	11	10-16	287	25	22-38	92	21	21-41	37	22	10-38	147	24	16-30	113	35	30-50	36	28	12-42	231	13	14-27
JOHN F KENNEDY MEDICAL CEN EDISON NJ 08817	NJ-44 *	211	2	9-20	.	.		103	2	16-34	.	.		.	.		.	.		.	.		.	.	
JOHN F KENNEDY MEMORIAL HO STRATFORD NJ 08084	NJ-45	3520	15	9-15	194	27	18-35	103	28	19-37	86	22	10-29	227	27	17-29	146	47	27-45	90	27	13-34	304	25	14-26
MEADOWLANDS HOSP MEDICAL C SECAUCUS NJ 07094	NJ-46	1186	11	8-15	87	26	17-39	41	32	18-47	16	19	7-48	84	24	13-31	38	55	23-54	13	31	7-54	116	11	12-28
MEDICAL CENTER PRINCETON PRINCETON NJ 08540	NJ-47 *	72	0	1-15	1	0	0-97	.				.		.	.		.	.		1	0	0-99	1	0	0-97
MEDICAL CENTER AT PRINCETO PRINCETON NJ 08540	NJ-48	2398	11	10-17	282	22	18-34	94	28	20-39	57	5	9-32	123	20	16-32	111	34	29-49	40	25	11-40	179	15	15-29
MEMORIAL GENERAL HOSP UNION NJ 07083	NJ-49	1504	16	10-17	109	43	17-37	70	39	18-40	28	21	7-37	123	24	16-32	60	45	29-55	26	23	8-41	128	23	13-29
MEMORIAL HOSP OF BURLINGTO MOUNT HOLLY NJ 08060	NJ-50	2802	12	10-16	245	24	19-35	117	21	20-38	80	14	10-30	120	23	17-33	109	38	29-48	57	21	8-32	213	23	15-29
MERCER MEDICAL CENTER TRENTON NJ 08607	NJ-51	1863	13	9-16	162	28	18-36	61	21	19-43	32	28	9-39	106	25	14-31	67	28	25-49	67	21	12-35	113	21	13-30
MERWICK REHABILITATION UNI PRINCETON NJ 08540	NJ-52 *	75	1	2-16	.	.		.	.		.	.		.	.		.	.		-	.		.	.	
MIDDLESEX GEN HOSP NEW BRUNSWICK NJ 08901	NJ-53	2050	11	8-14	156	23	18-36	54	30	17-42	39	31	9-36	87	16	14-32	89	34	27-48	34	29	6-35	103	17	11-28
MILLVILLE HOSP MILLVILLE NJ 08332	NJ-54	874	14	9-17	71	24	16-40	31	35	12-43	10	20	5-55	56	23	13-35	45	38	23-52	40	28	11-40	55	24	8-30
MONMOUTH MEDICAL CENTER LONG BRANCH NJ 07740	NJ-55 *	2793	12	9-16	238	30	20-36	83	18	18-38	71	21	9-29	133	23	15-30	103	33	29-49	46	22	10-36	214	18	14-28
MONTCLAIR COMMUNITY HOSP MONTCLAIR NJ 07042	NJ-56	953	12	10-17	74	16	15-37	55	27	18-43	25	12	6-38	70	21	14-35	35	49	28-61	43	26	10-37	78	21	13-32
MORRISTOWN MEMORIAL HOSP MORRISTOWN NJ 07960	NJ-57	3602	12	9-16	337	20	20-34	119	33	20-38	70	20	11-33	160	21	16-30	129	42	30-48	64	17	11-35	242	24	17-30
MOUNTAINSIDE HOSP MONTCLAIR NJ 07042	NJ-58	3392	13	10-17	394	20	18-32	150	33	22-38	94	14	10-29	144	21	16-31	173	38	32-49	55	22	7-31	218	27	16-30
MUHLENBERG HOSP PLAINFIELD NJ 07060	NJ-59	2802	14	10-16	302	28	18-33	132	35	20-37	68	15	7-27	149	19	16-30	104	35	31-52	54	22	9-33	220	23	14-27
NEWARK BETH ISRAEL MEDICAL NEWARK NJ 07112	NJ-60	2722	12	5-11	192	32	10-26	70	21	14-35	22	27	2-33	130	18	13-27	119	31	24-42	37	30	4-30	127	20	8-23

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAMILTDN HOSP TRENTDN NJ 08609	7	57	8-71	9	44	10-67	34	9	3-26	13	0	0-99	129	9	3-12	53	13	2-18	16	0	0-99	153	3	2-10	74	0	0-10
HELENE FULD MEOICAL CENTER TRENTDN NJ 08638	22	9	10-52	18	28	15-58	20	0	2-33	8	13	0-99	186	4	2-10	91	2	1-13	10	10	0-93	223	5	2-8	94	1	1-9
HDLY NAME HOSP TEANECK NJ 07666	17	24	8-52	25	52	23-62	89	7	4-18	57	0	0-17	341	8	3-9	139	5	2-12	30	0	0-27	242	2	3-10	205	3	1-5
HDSP CENTER AT DRANGE ORANGE NJ 07050	7	29	8-71	9	44	12-69	30	10	3-27	4	0	0-100	112	6	2-12	48	4	1-17	7	0	0-100	132	2	2-9	145	0	0-6
HUNTERODN MEDICAL CENTER FLEMINGTON NJ 08822	3	33	4-85	11	55	15-69	42	7	3-23	9	0	0-98	118	7	3-13	55	9	1-17	10	0	0-100	90	9	2-12	82	4	0-9
IRVINGTON GENERAL HDSP IRVINGTDN NJ 07111	6	33	3-67	7	43	13-76	22	5	2-31	3	0	0-99	112	6	2-12	32	0	1-22	3	33	0-100	119	3	2-11	50	2	0-14
JERSEY CITY MEDICAL CENTER JERSEY CITY NJ 07304	24	29	7-47	21	57	19-61	34	3	2-23	32	0	0-55	65	12	3-18	23	9	1-28	4	0	0-100	95	4	2-12	32	3	0-25
JERSEY SHDRE MEDICAL CENTE NEPTUNE NJ 07753	23	35	11-52	32	41	20-55	112	10	4-17	23	4	0-51	362	7	3-9	112	9	3-14	19	0	0-91	318	6	3-8	199	5	1-6
JOHN F KENNEDY MEDICAL CEN EDISDN NJ 08817	12	17	7-58	14	29	16-64	46	9	5-25	26	0	0-82	300	3	3-9	138	2	1-11	13	0	0-55	255	4	3-9	225	0	0-5
JOHN F KENNEDY MEDICAL CEN EOISDN NJ 08817	.	.		.	.		41	0	2-20	.	.			.		.	.		.	.		1	0	0-100	22	0	0-42
JOHN F KENNEDY MEMDRIAL HD STRATFORD NJ 08084	33	21	8-44	31	58	21-57	91	8	4-18	7	0	0-98	313	9	3-9	218	11	3-12	23	4	0-34	336	5	3-8	201	1	0-5
MEAODWLANDS HDSP MEDICAL C SECAUCUS NJ 07094	2	0	1-90	14	36	17-66	19	5	2-33	27	0	0-61	132	5	2-11	51	0	1-17	10	0	0-98	156	3	2-10	65	0	0-12
MEOICAL CENTER PRINCETDN PRINCETDN NJ 08540	.	.		.	.		.	.		.	.		4	0	0-81	3	0	0-98	.	.		7	0	0-69	2	0	0-100
MEOICAL CENTER AT PRINCETO PRINCETDN NJ 08540	7	14	4-66	15	27	15-62	57	11	3-20	32	3	0-34	207	4	2-10	173	3	2-11	16	0	0-98	189	5	2-9	114	1	0-7
MEMORIAL GENERAL HDSP UNION NJ 07083	9	44	10-68	8	50	13-73	44	7	3-22	8	0	0-99	149	3	2-10	98	6	1-13	3	0	0-100	129	8	2-10	109	2	0-8
MEMORIAL HDSP DF BURLINGTO MDUNT HDLLY NJ 08060	14	29	8-56	25	48	21-60	83	8	6-21	17	0	0-82	278	6	3-9	124	6	2-13	27	0	0-83	220	4	3-9	189	1	1-6
MERCER MEDICAL CENTER TRENTON NJ 08607	10	30	4-57	17	29	22-67	39	15	4-25	32	0	0-33	176	7	3-11	86	5	1-13	16	6	0-79	144	9	2-10	101	0	0-8
MERWICK REHABILITATIDN UNI PRINCETON NJ 08540	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		13	0	0-60
MIDOLESEX GEN HDSP NEW BRUNSWICK NJ 08901	18	33	10-54	16	63	16-62	34	9	3-25	52	0	0-23	159	5	3-11	71	8	1-14	18	0	0-66	360	4	3-8	188	1	0-5
MILLVILLE HOSP MILLVILLE NJ 08332	4	0	1-76	4	50	5-79	17	18	2-35	6	0	0-100	96	3	2-12	25	8	1-26	9	0	0-99	77	6	1-12	52	6	0-13
MDNMDUTH MEDICAL CENTER LDNG BRANCH NJ 07740	21	14	12-55	42	43	23-55	74	8	4-20	47	2	0-27	288	7	3-10	160	4	2-12	11	0	0-60	227	4	3-9	144	1	1-7
MONTCLAIR COMMUNITY HOSP MDNTCLAIR NJ 07042	5	20	4-73	6	33	6-71	35	6	2-23	22	5	0-81	99	7	3-13	31	0	0-23	5	0	0-99	66	3	1-13	60	0	0-12
MORRISTDWN MEMDRIAL HDSP MDRRISTDWN NJ 07960	33	15	9-45	37	32	21-54	108	6	4-17	75	0	0-11	312	7	3-9	214	5	2-11	35	0	0-37	311	5	3-8	235	2	1-5
MDUNTAINSIOE HDSP MDNTCLAIR NJ 07042	25	16	9-49	28	46	21-58	117	7	4-17	53	2	0-26	320	7	3-10	170	3	1-11	22	0	0-45	313	4	3-8	215	1	1-5
MUHLENBERG HDSP PLAINFIELD NJ 07060	25	20	8-47	30	47	21-57	75	11	5-21	4	0	0-100	260	5	3-10	105	6	1-13	24	0	0-42	248	7	3-9	158	1	0-6
NEWARK BETH ISRAEL MEOICAL NEWARK NJ 07112	48	15	3-35	14	57	11-58	17	29	1-33	4	0	0-100	142	5	1-9	73	1	1-14	13	0	0-100	818	8	2-6	89	0	0-10

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall			High Risk Diagnostic Categories: Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NEWCOMB HOSP VINELAND NJ 08360	NJ-61 *	1417	15	10-17	113	35	19-39	65	32	15-37	34	12	8-36	85	22	13-32	72	58	28-52	35	20	10-40	110	19	11-28
NEWTON MEMORIAL HOSPITAL NEWTON NJ 07860	NJ-62	1335	14	9-16	108	25	14-33	53	32	17-42	27	22	8-39	64	34	14-36	55	42	26-53	38	13	6-34	110	23	12-29
OUR LADY OF LOURDES HOSPIT CAMDEN NJ 08103	NJ-63	2351	13	9-15	140	26	18-36	84	27	20-41	37	35	10-38	128	24	16-32	94	30	26-47	32	22	6-35	143	28	13-29
OVERLOOK HOSP SUMMIT NJ 07901	NJ-64	4275	10	10-16	518	18	18-31	190	22	21-36	116	16	10-28	225	19	17-30	164	30	32-49	65	20	11-34	240	20	17-30
PALISADES GENERAL HOSP ASS NORTH BERGEN NJ 07047	NJ-65 *	1442	12	10-17	85	19	16-38	64	27	19-42	47	19	8-32	109	25	16-33	50	32	23-50	25	32	6-39	154	14	12-26
PASCACK VALLEY HOSPITAL WESTWOOD NJ 07675	NJ-66	2288	12	10-17	206	24	17-33	101	22	19-38	45	9	6-31	122	20	17-33	97	40	31-52	58	29	11-35	181	20	15-29
PASSAIC GEN HOSP PASSAIC NJ 07055	NJ-67 *	2438	11	8-15	171	19	17-34	88	23	19-39	32	25	9-39	149	28	16-31	126	37	29-47	35	23	9-38	121	21	13-29
PAUL KIMBALL HOSP LAKEWOOD NJ 08701	NJ-68	3403	18	11-18	261	31	19-34	140	29	22-38	78	21	11-32	216	33	19-32	114	44	32-52	102	42	14-35	245	33	18-32
RAHWAY MEMORIAL HOSP RAHWAY NJ 07065	NJ-69 *	1951	12	10-16	146	22	16-34	102	17	19-38	31	39	12-44	123	22	16-32	101	45	28-49	47	21	6-31	173	14	13-27
RARITAN BAY MEDICAL CENTER PERTH AMBOY NJ 08861	NJ-70	2823	14	10-17	235	22	18-34	125	28	22-39	56	20	13-37	163	23	16-30	127	46	30-49	83	31	10-32	226	18	14-27
RIVERVIEW HOSP RED BANK NJ 07701	NJ-71	3270	12	9-15	386	29	17-32	146	37	21-37	67	19	13-35	183	22	16-29	113	29	28-47	34	21	8-37	208	15	13-26
SADDLE BROOK GENERAL HOSP SADDLE BROOK NJ 07662	NJ-72	797	12	9-17	61	23	13-37	29	17	13-46	14	21	4-46	57	16	14-36	26	31	22-59	27	26	7-39	73	25	14-34
SALEM CO MEMORIAL HOSP SALEM NJ 08079	NJ-73	1261	16	9-16	87	31	17-38	54	30	17-41	28	25	7-38	75	31	14-33	67	49	29-53	32	25	7-37	104	15	10-27
SHORE MEMORIAL HOSP SOMERS POINT NJ 08244	NJ-74	2686	12	10-16	205	20	17-34	121	26	20-37	54	7	8-31	159	21	16-30	127	31	29-48	73	42	12-35	170	20	14-28
SOMERSET HOSP-THE SOMERVILLE NJ 08876	NJ-75	2501	14	9-16	211	26	17-33	132	31	21-38	48	25	10-35	148	30	17-32	96	40	30-51	39	23	6-33	200	21	14-28
SOUTH AMBOY MEMORIAL HOSP SOUTH AMBOY NJ 08879	NJ-76	918	10	8-15	50	16	17-44	29	21	14-46	12	33	5-51	56	20	11-33	40	43	21-51	21	24	5-40	58	3	10-31
SOUTH BERGEN HOSP HASBROUCK HEIGHTS NJ 07604	NJ-77 *	53	0	1-17	1	0	0-97	.	.		.	.		1	0	1-97	.	.		1	0	0-97	2	0	0-90
SOUTHERN OCEAN CO HOSP MANAHAWKIN NJ 08050	NJ-78	1552	16	10-17	97	10	15-36	84	31	19-39	56	25	9-32	100	28	15-33	76	36	27-50	49	41	12-39	137	24	14-29
ST BARNABAS MEDICAL CENTER LIVINGSTON NJ 07039	NJ-79	4263	12	9-16	464	24	19-33	126	27	21-39	98	12	12-31	217	25	19-32	124	44	31-50	59	25	11-35	207	20	13-27
ST CLARES RIVERSIDE MEDICA DENVILLE NJ 07834	NJ-80	1964	13	8-15	134	27	17-35	78	33	18-39	49	24	8-31	116	22	15-31	61	44	26-51	38	32	6-34	152	26	13-28
ST ELIZABETH HOSP ELIZABETH NJ 07207	NJ-81	1955	10	8-15	177	23	16-32	67	31	17-39	25	20	6-38	121	16	15-31	69	36	25-49	37	14	7-35	115	17	13-29
ST FRANCIS COMM HLTH CTR JERSEY CITY NJ 07302	NJ-82 *	1721	11	10-16	139	30	20-38	71	32	19-41	49	6	10-34	100	19	14-	66	39	26-51	30	20	10-42	136	16	13-29
ST FRANCIS MEDICAL CENTER TRENTON NJ 08629	NJ-83	2799	11	10-16	280	24	21-36	95	24	20-39	41	12	8-35	153	20	16-30	132	39	30-48	40	23	8-35	180	18	14-28
ST JAMES HOSP NEWARK NJ 07105	NJ-84 *	691	14	8-15	35	17	13-43	28	21	13-46	16	50	8-49	63	17	12-33	18	44	21-65	9	44	5-59	63	29	10-31
ST JOSEPHS HOSP PATERSON NJ 07503	NJ-85	3554	14	8-14	262	21	15-30	113	29	18-36	98	20	11-30	178	28	15-28	118	42	28-47	74	28	7-28	299	30	15-28
ST MARYS HOSP HOBOKEN NJ 07030	NJ-86 *	1757	12	9-16	120	26	18-38	57	32	17-41	49	22	11-37	122	26	16-32	50	42	26-53	41	27	13-42	126	15	13-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NEWCOMB HOSP VINELAND NJ 08360	12	33	15-69	16	44	13-58	38	3	3-23	8	13	0-100	129	5	2-10	60	7	1-16	6	0	0-100	142	1	2-9	70	1	0-10
NEWTON MEMORIAL HOSPITAL NEWTON NJ 07860	9	22	4-60	17	35	15-59	50	8	3-22	24	0	0-71	166	7	2-10	54	7	2-18	7	0	0-99	73	4	2-13	65	0	0-11
OUR LADY OF LOURDES HOSPIT CAMDEN NJ 08103	51	18	8-40	21	57	22-63	51	8	3-21	9	0	0-99	183	7	3-11	101	2	1-13	22	0	0-87	456	8	3-8	84	2	0-9
OVERLOOK HOSP SUMMIT NJ 07901	28	25	14-53	47	32	24-54	153	8	5-16	47	0	0-27	394	5	3-9	258	2	1-9	33	0	0-83	392	4	3-7	253	1	1-5
PALISADES GENERAL HOSP ASS NORTH BERGEN NJ 07047	11	27	9-62	24	29	20-60	38	11	4-26	10	0	0-99	156	4	3-11	64	2	1-15	8	0	0-99	142	4	2-10	62	2	0-11
PASCACK VALLEY HOSPITAL WESTWOOD NJ 07675	12	17	7-57	21	38	17-59	74	14	5-21	13	0	0-90	237	3	3-10	86	5	1-14	14	0	0-95	179	4	2-9	148	2	1-7
PASSAIC GEN HOSP PASSAIC NJ 07055	12	33	8-60	13	54	14-64	47	9	3-22	52	0	0-25	235	5	3-10	104	6	2-13	34	0	0-71	510	5	3-7	124	2	0-7
PAUL KIMBALL HOSP LAKEWOOD NJ 08701	16	56	16-64	109	42	28-51	106	10	6-19	77	0	0-10	286	7	4-10	182	12	4-13	22	5	0-78	298	4	3-9	192	2	1-6
RAHWAY MEMORIAL HOSP RAHWAY NJ 07065	20	25	9-51	20	65	21-64	50	12	5-25	24	0	0-70	210	5	2-9	104	4	1-13	12	0	0-95	182	3	2-9	118	1	0-7
RARITAN BAY MEDICAL CENTER PERTH AMBOY NJ 08861	19	16	8-50	27	44	21-59	92	11	6-20	22	5	0-50	279	8	3-9	145	7	2-13	16	0	0-98	276	5	3-9	137	4	1-7
RIVERVIEW HOSP RED BANK NJ 07701	23	22	12-53	19	58	17-60	111	10	5-17	55	0	0-21	346	6	3-8	119	4	1-12	24	0	0-65	255	3	2-8	200	4	0-5
SADDLE BROOK GENERAL HOSP SADDLE BROOK NJ 07662	7	57	6-68	12	42	19-72	20	10	3-34	22	0	0-75	108	6	2-12	22	5	1-28	12	0	0-99	71	7	2-13	43	2	0-18
SALEM CO MEMORIAL HOSP SALEM NJ 08079	7	43	4-65	11	18	11-64	22	14	2-31	16	0	0-95	140	4	1-9	52	6	2-18	13	0	0-78	115	4	1-10	88	1	0-9
SHORE MEMORIAL HOSP SOMERS POINT NJ 08244	8	38	9-69	34	29	19-53	94	14	4-17	18	0	0-83	306	6	4-10	119	2	1-12	17	6	0-88	197	6	3-9	125	1	0-7
SOMERSET HOSP-THE SOMERVILLE NJ 08876	15	20	8-55	22	36	21-62	75	7	4-19	17	0	0-87	257	8	3-9	85	8	2-14	25	0	0-73	205	4	2-8	173	1	0-5
SOUTH AMBOY MEMORIAL HOSP SOUTH AMBOY NJ 08879	4	0	5-80	12	42	10-59	19	0	1-32	16	0	0-88	82	0	2-14	32	6	1-22	4	25	0-100	89	4	2-11	53	2	0-14
SOUTH BERGEN HOSP HASBROUCK HEIGHTS NJ 07604	.	.		.	.		.	.		1	0	0-100	4	0	0-96	5	0	0-90	.	.		1	0	0-100	20	0	0-77
SOUTHERN OCEAN CO HOSP MANAHAWKIN NJ 08050	11	27	5-57	17	47	17-62	30	3	2-26	12	0	0-99	146	5	3-11	72	3	1-14	8	0	0-92	131	5	2-10	85	2	0-9
ST BARNABAS MEDICAL CENTER LIVINGSTON NJ 07039	52	17	7-38	44	16	22-53	107	10	5-18	108	0	0-7	421	5	3-9	229	5	2-10	56	0	0-13	432	5	3-8	240	4	1-5
ST CLARES RIVERSIDE MEDICA DENVILLE NJ 07834	8	25	2-60	30	53	20-56	72	6	4-20	16	0	0-95	169	11	3-11	100	2	1-12	14	0	0-91	160	5	2-9	116	1	0-7
ST ELIZABETH HOSP ELIZABETH NJ 07207	6	33	6-72	8	50	13-73	26	12	3-29	3	0	0-100	214	6	2-9	92	8	1-13	20	0	0-67	315	4	3-8	92	0	0-8
ST FRANCIS COMM HLTH CTR JERSEY CITY NJ 07302	8	13	1-60	9	44	12-69	35	6	5-28	39	0	0-31	211	2	3-10	119	3	1-12	11	0	0-61	162	7	3-11	53	2	0-13
ST FRANCIS MEDICAL CENTER TRENTON NJ 08629	18	33	10-54	19	42	18-61	46	7	4-23	57	0	0-16	279	4	3-9	187	3	1-10	32	0	0-58	245	3	3-9	155	3	0-6
ST JAMES HOSP NEWARK NJ 07105	3	0	3-84	1	100	1-97	17	12	1-34	10	0	0-100	55	9	1-15	34	3	1-21	8	0	0-99	69	12	1-13	46	2	0-16
ST JOSEPHS HOSP PATERSON NJ 07503	60	35	7-37	26	38	17-55	73	11	4-19	15	0	0-97	236	6	2-9	114	5	2-13	19	0	0-49	837	7	3-6	98	0	0-8
ST MARYS HOSP HOBOKEN NJ 07030	10	40	12-68	23	43	21-61	24	4	3-30	30	0	0-55	172	5	2-10	97	3	1-13	11	0	0-99	145	5	2-10	63	2	0-11

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST MARYS HOSP DRANGE NJ 07050	NJ-87 *	1591	12	6-13	133	22	11-28	60	35	16-38	42	5	3-27	93	30	12-30	43	44	22-51	37	14	5-32	116	13	11-27
ST MARYS HOSP PASSAIC NJ 07055	NJ-88	1707	12	9-15	145	17	14-31	83	25	19-39	21	24	4-38	106	32	15-32	68	49	26-50	39	33	12-42	112	23	13-30
ST MICHAELS MEOICAL CENTER NEWARK NJ 07102	NJ-89	1630	11	7-14	75	24	17-40	31	23	14-45	19	11	6-42	86	15	14-32	54	33	24-50	31	32	11-43	109	19	12-29
ST PETERS MED CENTER NEW BRUNSWICK NJ 08903	NJ-90	2950	13	10-16	280	23	19-34	92	25	20-39	49	12	10-34	176	25	17-30	111	43	31-51	49	37	10-36	227	23	17-30
THE NDRTHERN OCEAN HDSP POINT PLEASANT BEACH NJ 08742	NJ-91	4323	13	10-17	441	26	20-34	240	26	22-35	95	20	10-29	330	26	17-28	150	43	30-47	42	24	11-39	282	18	13-25
UNDERWOOO MEM HOSP WOODBURY NJ 08096	NJ-92	2885	15	10-16	183	28	20-38	111	24	19-37	72	18	10-31	175	34	15-28	136	32	28-46	80	28	11-33	225	23	13-27
UNITED HOSPS OF NEWARK NEWARK NJ 07107	NJ-93	1345	13	6-13	68	26	8-29	57	23	14-37	24	13	4-34	56	23	10-32	37	32	23-55	55	27	6-29	123	26	10-25
UNIVERSITY HOSP NEWARK NJ 07107	NJ-94	717	12	6-14	57	33	17-42	24	25	8-41	16	25	5-45	29	21	7-35	9	33	11-67	23	22	5-39	58	16	7-27
VALLEY HOSP RIDGEWOOD NJ 07450	NJ-95	4078	12	9-16	399	22	18-33	164	27	21-37	61	20	9-32	241	28	17-29	177	33	30-47	55	18	9-33	258	18	14-27
WALLKILL VALLEY GEN HOSP A SUSSEX NJ 07461	NJ-96 *	674	12	9-17	62	26	17-42	30	17	14-46	13	23	5-49	43	33	12-37	21	29	17-57	14	14	3-45	77	16	10-28
WARREN HDSP PHILLIPSBURG NJ 08865	NJ-97	1743	14	9-16	142	25	18-36	60	25	16-39	36	25	6-33	102	33	16-33	51	47	27-54	56	36	11-36	172	18	15-29
WAYNE GENERAL HOSP WAYNE NJ 07470	NJ-98	1964	15	9-16	167	25	15-32	82	37	19-39	39	26	9-36	152	26	15-29	67	46	27-52	37	35	10-40	200	25	14-28
WEST ESSEX GENERAL HDSP LIVINGSTDN NJ 07039	NJ-99 *	435	11	7-15	14	7	11-57	8	13	7-65	5	20	2-69	18	22	9-47	22	86	25-65	11	9	5-53	41	20	10-36
WEST HUDSON HOSP KEARNY NJ 07032	NJ-100	1566	11	10-17	104	20	17-37	61	25	17-40	38	11	8-35	136	15	14-29	56	46	26-52	46	26	13-40	122	18	14-31
WEST JERSEY HOSP-COMBINED CAMDEN NJ 08104	NJ-101	5580	13	9-15	413	24	18-32	217	30	21-35	119	15	11-29	340	27	17-28	170	38	28-45	176	23	12-30	376	22	14-25
WILLIAM B KESSLER MEM HDSP HAMMONTDN NJ 08037	NJ-102	982	13	9-16	35	31	14-45	41	37	17-45	23	22	5-37	73	21	16-36	30	20	24-59	23	35	7-43	64	28	13-35
ZURBRUGG MEM HDSP - RANCOC WILLINGBDRO NJ 08046	NJ-103*	1366	12	10-17	87	26	18-40	60	20	18-42	28	32	9-41	110	24	16-33	51	47	26-53	36	28	15-47	85	20	11-30
ZURBRUGG MEMDRIAL HOSP RIVERSIOE NJ 08075	NJ-104	921	14	10-17	60	17	11-35	59	36	17-41	21	33	7-43	83	24	15-35	44	27	24-54	15	20	6-48	77	23	12-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST MARYS HOSP ORANGE NJ 07050	8	25	1-60	20	55	12-52	40	10	2-21	6	0	0-100	167	5	2-9	109	1	1-12	13	8	0-99	130	3	1-8	103	0	0-8
ST MARYS HOSP PASSAIC NJ 07055	3	0	7-89	9	44	12-70	20	0	1-31	29	0	0-53	181	8	3-11	93	1	1-13	15	0	0-97	136	7	2-10	72	6	0-10
ST MICHAELS MEDICAL CENTER NEWARK NJ 07102	18	33	9-53	17	29	13-57	16	19	2-36	36	0	0-25	106	8	2-12	59	3	1-16	13	0	0-99	341	7	3-8	72	0	0-10
ST PETERS MED CENTER NEW BRUNSWICK NJ 08903	20	5	11-54	20	25	19-61	65	12	5-23	69	1	0-13	315	6	2-8	128	9	2-13	22	0	0-35	332	4	2-8	132	2	1-7
THE NORTHERN OCEAN HOSP POINT PLEASANT BEACH NJ 08742	27	37	14-53	37	43	21-55	133	5	5-17	34	0	0-49	569	4	4-9	150	3	2-12	14	0	0-92	350	5	3-8	302	1	1-5
UNDERWOOD MEM HOSP WOODBURY NJ 08096	18	44	13-58	49	39	23-52	77	9	4-19	11	0	0-100	309	7	3-10	130	7	2-13	14	0	0-92	272	6	3-8	149	1	0-6
UNITED HOSPS OF NEWARK NEWARK NJ 07107	12	0	2-52	51	43	20-49	17	29	1-34	108	0	0-12	105	8	1-10	50	10	1-17	5	0	0-99	105	4	1-9	99	0	0-9
UNIVERSITY HOSP NEWARK NJ 07107	14	7	1-51	3	0	2-82	8	25	2-54	4	0	0-100	44	16	2-19	22	5	0-30	10	0	0-98	63	2	1-13	24	0	0-29
VALLEY HOSP RIDGEWOOD NJ 07450	31	35	10-47	43	30	22-54	129	9	5-17	38	0	0-35	511	5	3-8	170	4	2-11	43	0	0-31	468	4	3-7	219	1	0-5
WALLKILL VALLEY GEN HOSP A SUSSEX NJ 07461	5	40	3-72	12	25	14-65	10	20	2-49	4	0	0-100	98	4	1-11	31	3	1-23	3	0	0-100	65	2	2-14	35	0	0-22
WARREN HOSP PHILLIPSBURG NJ 08865	10	30	8-63	15	33	15-62	60	7	4-20	4	0	0-100	193	7	3-11	78	8	2-15	10	0	0-99	158	5	2-9	73	5	1-11
WAYNE GENERAL HOSP WAYNE NJ 07470	12	25	6-56	18	50	19-63	73	7	4-18	21	0	0-90	257	4	2-8	125	5	1-12	13	0	0-92	130	3	2-10	94	1	0-8
WEST ESSEX GENERAL HOSP LIVINGSTON NJ 07039	3	33	3-83	2	50	2-90	11	0	2-45	20	0	0-83	32	6	1-20	31	3	2-24	2	0	0-100	34	0	1-19	71	1	0-12
WEST HUDSON HOSP KEARNY NJ 07032	9	33	5-62	23	39	19-58	36	8	3-25	6	0	0-100	139	4	3-11	81	0	1-14	6	0	0-99	156	3	2-9	78	3	0-10
WEST JERSEY HOSP-COMBINED CAMDEN NJ 08104	26	27	10-49	48	54	26-56	145	8	4-15	33	0	0-47	648	6	3-8	229	8	2-11	38	0	0-23	418	4	3-7	396	2	1-4
WILLIAM B KESSLER MEM HOSP HAMMONTON NJ 08037	7	14	6-68	14	29	15-63	16	6	1-36	5	0	0-100	116	2	2-11	55	9	2-18	1	0	0-100	94	5	1-11	53	0	0-14
ZURBRUGG MEM HOSP - RANCOC WILLINGBORO NJ 08046	9	33	12-71	15	33	15-62	25	12	2-28	2	0	0-100	138	9	3-11	40	0	0-20	13	0	0-57	130	3	2-10	89	0	0-9
ZURBRUGG MEMORIAL HOSP RIVERSIDE NJ 08075	4	50	3-77	10	30	15-71	23	9	2-29	9	0	0-94	98	9	2-13	56	9	2-17	4	0	0-100	83	4	2-12	42	0	0-16

*Written Comments Not Submitted.

ALEXIAN BROTHERS
Hospital

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Finance Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

I wish to thank you for the opportunity to comment on your hospital-specific mortality data planned to be released some time during the month of December.

Let me first express Alexian Brothers Hospital's strong belief that the public has a right to receive legitimate information concerning quality of health care being rendered by both individual physicians and hospitals. We do not, however, believe that HCFA's data represents "legitimate" information relative to quality. Although your intentions may not be as such, implicit in your statistical methods is the assumption that predicted mortality rates should be taken as normative. Consequently, users of the data may conclude that quality problems exist where in fact they do not, or vice versa.

There exists a grave danger that this data may be read by the public as implying that the publication of hospital mortality statistics will provide a consumer guide to hospital performance when in fact this information provides no valid indication of hospital quality whatsoever. Of key importance is that this model does not measure all or even close to all patient characteristics that can effect the hospital's mortality rate.

Severity of patient illness is one of many important factors that are not considered in the mortality rate calculations. The predicted ranges of mortality for a hospital do not take into account how severely ill many patients are at point of admission. With HCFA's model, a patient admitted for a particular diagnosis without any other underlying physical conditions is treated the same as one admitted for that same diagnosis but with numerous other physical problems. This is an issue at Alexian Brothers Hospital where, as an End-Stage Renal Disease provider many admitted to our facility have renal disease as a secondary or tertiary condition to what they were hospitalized for. Clearly, an individual with multiple physical problems is more likely to expire than one with few. HCFA's data does not take this factor into consideration.

At very best, the HCFA data only serves to provide hospitals with information indicating areas that may require further study. Alexian Brothers Hospital has had in place for many years a system for quality review. Included in this Hospital-wide program is peer evaluations where physicians review physicians for a number of areas ranging from

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necessity in quality of surgical intervention to advisability of a particular chosen antibiotic therapy. All Hospital mortalities are reviewed by committees composed of physicians. The results of all these reviews are reported on a monthly basis to an executive committee of the medical staff who, in turn, reports their findings and actions to the Board of Trustees for the Hospital. The comprehensiveness of Alexian Brothers quality review program is evidenced by the Hospital's just having received a three year accreditation from the Joint Commission on Accreditation of Hospitals whose main focus is evaluation of hospitals' quality assurance mechanisms. Very stringent criteria must be met in order for one to receive such accreditation.

Alexian Brothers Hospital strongly feels that the public be cautioned that these data do not provide in any way an index to hospital performance. The issuance of data under the misnomer of "public information" for purposes of gauging quality of care is a disservice to that same public and to the hospitals and medical personnel who provide such care.

Thank you once again for the opportunity to comment on this information.

Sincerely,

Michael Schwartz

Michael J. Schwartz
President/Chief Executive Officer

BAYONNE
HOSPITAL
29 East Twenty Ninth Street · Bayonne, New Jersey 07002 · Tel. 201/858-5000

DENNIS J. BRUSCHI
EXECUTIVE VICE PRESIDENT

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for the opportunity to comment on the HCFA Medicare Mortality data for Bayonne Hospital (310025) prior to its release in December, 1987.

This data shows that 229 of 2,246 Medicare patients admitted to Bayonne Hospital died within 30 days of admission. Of these, 20 died following discharge. Our own records show that 4,553 Medicare admissions occurred during 1986. This difference most likely is due to multiple admissions of Medicare patients to this hospital, since the number HCFA used excludes all but the last admission of Medicare beneficiaries admitted more than once during the year. We have no way of verifying whether the number of Medicare patients admitted, which was used for this analysis is correct.

Our records also show that of the 229 Medicare patients who died within 30 days of admission, 21 were still alive at the time of discharge. Presumably one patient died on the day of discharge after leaving the hospital. It is impossible to verify the accuracy of the number of patients dying after discharge as information concerning death after discharge is not easily obtainable.

Review of the patient information provided us showed diagnostic coding errors for three cases. While these did not affect the actual mortality rates, it raises the question as to whether the eight important chronic comorbidities were accurately captured. Without the detailed billing information available to HCFA in computing the predicted mortality rates and ranges, we cannot verify the accuracy of the data used in the HCFA analysis.

Quality of patient care is of the highest importance to Bayonne Hospital's Board of Directors, Administration, and Medical Staff. We would like to note that this data alone cannot demonstrate the quality of care provided by any hospital. At best, the HCFA data is only one of many indicators that can be utilized to evaluate a hospital's performance.

Sincerely,

Dennis J. Bruschi
Chief Executive Officer

AW:rp

Bayshore Community Hospital
727 North Beers Street
Holmdel, New Jersey 07733
(201) 739-5900

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, DC 20201

Dear Dr. Roper,

Thank you for allowing us the opportunity to review the data assembled by the Health Care Financing Administration and to prepare and present a response to the findings.

While we at Bayshore Community Hospital fall within the established norms, we remain wary and caution others not to use this data as a standard by which to judge the quality of care rendered at any given healthcare facility. We will however, use this information internally as one part of our existing Quality Assurance Program.

Additionally, we share some concern over the reliability of the data associated with the report and recommend that this be reviewed before public release.

Sincerely,

Thomas Goldman, F.A.C.H.E.
President

HCFA/EXEC.SEC.
1987 OCT 27 AM 10:52

BETH ISRAEL HOSPITAL
70 PARKER AVENUE / PASSAIC, NEW JERSEY 07055 / (201) 365-5000

Founded 1926

JEFFREY S. MOLL
Executive Director
PAUL WATERS
President
MILTON KLEINMAN
GERALD LIPKIN
NORMAN PICKELNY
ROBERT RACHESKY
ROBERT SINGER
Vice-President
JON GURKOFF
Secretary
ARTHUR GURTMAN
Treasurer

October 28, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O.Box 26684
Baltimore, Maryland 21207

Gentlemen:

Hospital ID#310020 is a 223 bed community, not for profit hospital in an urban setting. The emphasis of the institution is on all aspects of cancer care, and general medical-surgical care of all age groups, but particularly the over 72 age group. The Medicare death statistics reflect this age group. The average age of all deaths is 78 years old.

Of the 256 patients listed, 39 expired within 30 days after discharge. Actually 4 of these died in the hospital. The dates of death of these four do not coincide with that on the chart nor that recorded in the abstract. This discrepancy will alter the after discharge statistics. 14 of the 35 patients (40%) were transfers from a nursing home and back to the nursing home. The median span between discharge and death was 7-8 days. The conclusion is that these elderly patients were discharged from the hospital after acute care was no longer required and returned to a nursing home, a home setting or a hospice to shortly expire. One patient was transferred to another acute care facility. The average age of the death after discharge group is 81 years old. Since these were short stay cases, the conclusion is that these elderly patients with several comorbidities and prone to the loss of homeostasis were in a downhill stretch and progressing in an accelerated fashion. To turn these patients around is difficult, if not impossible.

29 of 227 deaths occurred within 24 hours and 19 within 48 hours. Most of these patients were transfers from nursing homes. It's interesting to note that the 24 hour group had two large sub-groups (cancer and severe acute heart disease) and that the 48 hour group was evenly distributed throughout most categories. This is in keeping with the national statistic on death and discharges from hospitals. The large cancer sub-group in the 24 hour group represents the admission of dying patients. The large sub-group of severe acute heart disease - predominently myocardial infarctions - represents a medical dilemma. Both groups of death are not preventable.

There are 10 deaths listed in the low-risk heart disease category. These cases are transfers of patients from local hospitals for radiation therapy and have been listed in the HL group based upon a secondary diagnosis. If risk is to be considered significant in this statistical analysis, than all diagnoses, primary, secondary, surgical and other comorbidities should be considered.

According to hospital statistics, 45% of the Medicare deaths involved oncology patients. Obviously these patients die due to a symptom (s) failure. When the system failure is the reason for admission, the principle diagnosis that is utilized puts the patient into a low risk grouping. In these patients the cancer diagnosis is a secondary diagnosis. Therefore, taking these factors into consideration in this statistical presentation, more than just the principle diagnosis should be considered.

The remainder of the report appears to be accurate.

Thank you for allowing me to comment.

Sincerely,

Jeffrey Moll

Jeffrey S. Moll
Executive Director

JSM:bs

BRIDGETON
HOSPITAL
ASSOCIATION, INC.

IRVING & MANHEIM AVENUES
BRIDGETON, NEW JERSEY 08302
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PAUL S. COOPER, PRESIDENT
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WILLIAM J. REHRIG, SR.
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October 27, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: Hospital ID#310068

Dear Dr. Roper:

In reviewing the preliminary release of the Health Care Financing Administration mortality rates study, we found that we were well within the normal range guidelines. However, we take no comfort in these results. Our Medical Director and other designated chiefs conducted an initial review of the data. We have concerns with some of the data, especially as it relates to Low Risk GI and Severe Acute Heart Disease.

Our preliminary investigation in the category GI revealed the following information:

- Three admissions died post discharge; two of these died from cardiac causes not related to hospitalization.
- Two admissions were miscoded by our institution. They were actually cancer patients in terminal condition.
- Two admissions involved patients with end-stage liver disease who died of untreatable liver failure. We question whether these should have been included in this category, considered "low risk" disease.
- It appears that several of the other admissions should not be in the Low Risk GI category because of their condition on admission.

Our preliminary investigation into the category HS - Severe Acute Heart Disease, revealed that:

- 11 admissions died either upon admission or within 24 hours of admission.
- One admission suffered a ruptured aortic aneurysm and died of renal failure in the postoperative period.
- Six admissions were resuscitated in the emergency room after an acute cardiac event, either at home or in the ambulance or shortly after admission to the emergency room.
- Approximately 1/3 of the mortalities in this category were patients who the physician had decided, in consultation with family members, should not be resuscitated.

It is important to point out that Bridgeton Hospital is an acute care community hospital that serves a very large percentage of elderly patients. We are also a referral center for three nursing homes.

We have an established Quality Assurance Board accountable to the Board of Directors of the Hospital. We are committed to the delivery of safe, therapeutic and cost-effective care for area consumers of our health services. We maintain concurrent reviews of patient care in many parameters and conduct an active monthly review of all mortalities, with constant monitoring of risk indicators. We believe that an appropriate assessment of our hospital's performance would be dependent upon many variables, requiring a look at many quality indicators, of which mortality is but one.

We are pleased that in 1987 the Health Care Financing Administration allowed for our comments prior to the public release of mortality information. We encourage a closer relationship between the hospital industry and the federal government in this complicated process.

Yours truly,

Paul S. Cooper

Paul S. Cooper
President

PSC/mlj

Burdette Tomlin Memorial Hospital

Cape May Court House
New Jersey 08210
609-465-2000

Medicare Provider Number 310011

October 27, 1987

Mr. William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Burdette Tomlin Memorial Hospital would like to present a summary of comments that reflect our observations on the HCFA mortality data. These comments are being sent to be included with the public data release on Hospital Mortality scheduled for December 1987.

1. Mortality data is not in itself a measure of quality of care.
2. Mortality rates do not explain why a patient died.
3. Mortality rates do not take into account the severity of an individual patient's injury or illness. For example
   - A. If the patient had multiple medical/surgical problems. The data at present only reflects selected underlying conditions. By selecting conditions data can be skewed statistically.
   - B. Cancer deaths rates have not taken into account that different cancers will have longer or shorter survival rates depending on type of cancer and progression of the disease when detected.
   - C. The source of the patient admission was not considered. For example the medicare patients admitted from nursing homes tend to be sicker than those who are admitted from home. Burdette Tomlin Memorial Hospital in Cape May County has a high number of nursing home admissions due to the large number of nursing home beds in the county. Burdette Tomlin Memorial Hospital is the only hospital in the county to serve the nursing home population. Our hospital shows three times the number of patient transfers to nursing homes than other comparable hospitals in New Jersey.
4. This mortality report reflects only medicare patient and not our entire hospital population.
5. The HCFA data reflects patients that died within 30 days of admission but did not die in our hospital, which is exactly 17.2% of the population reported in our mortality data.

6. Mortality is considered an occurence and is easily measured.
7. Statistics are a useful tool only when the user understands what the information reflects.
8. Measuring and monitoring mortality rates are part of our hospital's ongoing quality assurance program. This is done for all patients that have died in the hospital.
9. Each mortality at our hospital is identified by our quality review department and an additional focus review is done to identify any potential problem. Any patient chart that does not meeting approved criteria are then brought to a physicians peer review committee for problem identification and corrective action.
10. In the past 18 months January 1986 until August 1987 our hospital shows less than a 1% mortality rates for surgical patients. Medical mortalities also remain stable at 4% for past 18 months.
11. Mortality is one of twenty three possible occurences that are reviewed continually on 100% of our hospital's inpatients including same day surgeries.
12. Reviewing all hospitalized patient records for possible outcomes such as mortalities provides our hospital with an opportunity to identify problem areas and to focus our physician review of care to specific situations rather than random chart review. By selecting medical records for peer review based on specific criteria the opportunity to identify situations requiring corrective action is enhanced. This quality review is a similiar model that PRO uses as mandated by HCFA.
13. Our hospital also performs 100% concurrent review which allows for problem identification and resolution during the patient stay. Quality review in some hospitals is only done at discharge of patient which does not reduce or prevent an adverse occurence during the patient stay.

Sincerely,

Wm H. Waldron, III

Wm. H. Waldron, III
President

WHW:sgs

cc: Alan Gould, Chairman, BTMH Board
Warren MacDonald, M.D., President-Medical Staff
Robert Furey, D.O., Chairman-Quality Assurance Committee
William Silverman, M.D., Chairman-Utilization Review Committee

CARING FOR YOU - CARING ABOUT YOU - CARING FOR YOU - CARING ABOUT YOU
CMH

Chilton Memorial Hospital
Pompton Plains · NJ · 07444
201/831-5000

October 27, 1987

William L. Roper, M. D., Administrator
Health Care Financing Administration
Washington, D. C. 20201

Medicare Provider No. 310017

Dear Dr. Roper:

I am pleased to have this opportunity to respond to the recent release of Medicare Mortality Rates by the Health Care Financing Authority. We wish all former and future patients of Chilton Memorial Hospital to be aware of the following:

Chilton Memorial Hospital has long had a comprehensive Quality Assurance Program which carefully monitors the quality and appropriateness of care given to every patient. This monitoring process uses a statistical approach as a preliminary method of identifying certain cases that appear to require a more thorough review. However, we know that data analyses alone, and more specifically mortality data alone, are never an adequate measure of the quality of care that we provide. Therefore, at Chilton all deaths are carefully reviewed by physicians who are charged by the Board of Trustees with the thorough evaluation of every death using specific written criteria. Furthermore, our Quality Assurance and Utilization Review Departments daily monitor all aspects of patient care from admission through discharge. These clinical specialists are experts in detecting potential problems before they happen, thus avoiding medical and clinical problems. During its latest inspection in August 1987, the Joint Commission on Accreditation of Healthcare Organizations commended Chilton Memorial Hospital for its Quality Assurance Program and the excellence of its peer review process.

While we welcome the attempt of HCFA to augment our on-going quality of care review measures, we caution our patients and their families on two issues relating to the interpretation of this raw data:

1. HCFA has stated that "not all of the factors affecting the probability of death...most notably severity of illness, are included in the predictive model. Thus...a difference between a hospitals' actual and expected mortality cannot be construed as reflecting an especially high or low quality of care."

2. HCFA has predicted an expected death rate range for every hospital using a highly complex statistical formula and hospital-specific data. HCFA does not intend that this data be used to compare one hospital against another and cautions that any such comparison is absolutely invalid. The intent of the data is to motivate all hospitals, even hospitals like Chilton which have exemplary quality review programs already in place, to continuously improve upon methods of monitoring care in their institutions.

We have carefully reviewed the mortality data as presented by HCFA. It should be noted that upon review of every medical record in the categories entitled Metabolic Disturbances, Pulmonary Diseases and Sepsis, HCFA data are inaccurate and we hereby request that HCFA acknowledge the corrected data as attached hereto and recalculate expected mortality rates.

The following summarizes our findings using corrected data:

METABOLIC ELECTROLYTE DISTURBANCES
The predicated mortality range for this disease category was 6 to 31%. Chilton experienced a 38% mortality rate.

* The HCFA model for predicting mortality becomes more valuable as the number of deaths in a particular category increases. The number of deaths in this category at Chilton Memorial Hospital is too low to make an accurate prediction as to the expected mortality range and should be considered invalid.

PULMONARY DISEASE
The predicted mortality range for this disease category was 13 to 28%. Chilton experienced a 31% mortality rate.

* The average age of the patients who died from Pulmonary Disease was 84.5 years.
* Twenty-five patients in this category were admitted to Chilton Memorial Hospital with personal requests or requests from their families that the patient receive supportive care only and be made comfortable but that no excessive medical or technological intervention be used. In essence, these patients were at the end stages of illness and near death when admitted. In fact, 13 of these patients died with two to 45 hours after admission.
* Forty-nine per cent of the patients in this category were receiving total care in nursing homes prior to admission.
* Sixteen per cent of these patients had other severe complicating factors including cancer.

GASTROINTESTINAL DISEASE
The predicted mortality range for this disease category was 2 to 9%. Chilton expereienced a 10% mortality rate.

* The average age of patients who died from gastrointestinal diseases was 81 years.
* Thirty-eight per cent of the patients in this category were receiving total care in nursing homes prior to admission.
* Twenty-five per cent expired within 48 hours of admission, indicating the advanced stage and irreversibility of their illness.
* Thirty-one per cent had other severe complicating illnesses including cancer.
* Thirty-eight per cent had requested supportive care only with no excessive measures to prolong life.

SEPSIS
The predicted mortality range for this disease category was 17 to 50%. Chilton experienced a 53% mortality rate according to HCFA original data.

* Upon thorough review of all cases in this disease category, Chilton Memorial Hospital has determined that HCFA data are incorrect and that corrected data

show an actual mortality rate of 47%. This rate falls within expected parameters.

OVERALL MORTALITY RATE
The predicted overall mortality range for Chilton Memorial Hospital was 7 to 14%. Chilton experienced a 15% mortality rate.

* In calculating the overall Medicare mortality rate for Chilton Memorial Hospital, HCFA data used only certain Medicare cases (1834). In fact, during 1986 Chilton treated 2904 Medicare patients. This represents a 9.7% mortality rate, well within the predicted 7 to 14%. The Hospital's over-all mortality rate was 2.5%.
* All Medical Records of the 91 patients who were included in the above four categories were closely examined. This in-depth review confirmed that the severity of illness of the Chilton patient population was in no way accounted for in the HCFA data and is crucial to a proper understanding of this data.
* Ninety-eight per cent of patients admitted in the four above mentioned categories were Emergency admissions.
* Fifty-four per cent were terminally ill and had requested that no extraordinary means be used to prolong life.
* Thirty per cent expired within 49 hours following admission.
* Forty-one per cent were receiving total care in nursing homes prior to admission.
* Thirty-one per cent had severe complicating factors.

Chilton Memorial Hospital will never refuse to accept a terminally ill patient. Death is, most often, a family event and Chilton has a full team of support specialists including social workers and a fully staffed Pastoral Care Department which brings care and concern and support to patients and their families when needed. Chilton sees this commitment to support at the time of death as an important adjunct to its excellent medical care.

The HCFA data, when understood in their proper context and with their present limitations, should serve as a primitive tool to encourage the consumer to ask questions about his or her health care. However, it should not be used to judge the quality of care at any hospital.

We urge HCFA to utilize the statistical model that has been develped by the New Jersey Professional Review Organization. That model incorporates more refined severity of illness factors and better reflects statistical mortality data in New Jersey Hospitals.

Chilton Memorial Hospital remains committed to providing the highest quality of medical care as proven by our 35 years of excellence in serving the families of our 20 surrounding communities.

Sincerely,

Gerald M Krantz

Gerald M. Krantz, F.A.C.H.E.
President and Chief Executive Officer

Vincent M. Napoliello M.D.

GMK:pk

Vincent Napoliello, M. D.
President, Medical-Dental Staff

HOSPITAL 310017
CHILTON MEMORIAL HOSPITAL
POMPTON PLAINS, NEW JERSEY

	DIAGNOSTIC CATEGORY	CASES	C.M.H. MORT. #	C.M.H. MORT. %	RANGE OF PREDICTED MORT. RATES
CA	CANCER	147	29	20%	9 TO 26%
CE	CEREBROVASCULAR ACCIDENTS	89	27	30%	17 TO 37%
EY	OPHTHALMOLOGIC DISEASE	15	0	0%	0 TO 94%
GC	GASTROINTESTINAL CATASTROPHIES	41	9	22%	5 TO 29%
GI	GASTROINTESTINAL DISEASE	168	16	10%	2 TO 9%
GU	UROLOGIC DISEASE	113	10	9%	1 TO 12%
GY	GYNECOLOGIC DISEASE	16	1	6%	0 TO 100%
HL	LOW RISK HEART DISEASE	122	11	9%	1 TO 9%
HM	SEVERE CHRONIC HEART DISEASE	102	27	26%	12 TO 29%
HS	SEVERE ACUTE HEART DISEASE	68	24	35%	24 TO 48%
ME	METABOLIC/ELECTROLYTE DISTURB.	42	16	38%	6 TO 31%
OP	ORTHOPEDIC PROCEDURES	95	0	0%	0 TO 8%
PN	PULMONARY DISEASE	144	45	31%	13 TO 28%
RN	RENAL DISEASE	10	6	60%	4 TO 60%
SE	SEPSIS	30	14	47%	17 TO 50%
TR	SEVERE TRAUMA	69	1	1%	2 TO 16%
UN	OTHER UNGROUPED CONDITIONS	563	47	8%	
	TOTAL - ALL CAUSES	1834	283	15%	7 TO14%

CH

CHRIST HOSPITAL

176 Palisade Avenue, Jersey City, New Jersey 07306 (201) – 795-8400

OFFICE OF THE
PRESIDENT

October 15, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Christ Hospital
Jersey City, N.J.
I.D. Number 310016

Dear Dr. Roper:

Thank you for the opportunity to review in advance the 1986 Medicare Mortality Report.

In 1986, there were 4380 Medicare admissions to Christ Hospital. The Medicare Mortality Report is based on 2194 admissions - half of the actual number of patients. A comparison of the Medicare Mortality Reoprt and actual data from Christ Hospital is as follows:

All Causes	Admissions	Deaths	Actual Mortality Rate
Medicare Mortality Report	2194	250	11%
Actual Christ Hospital	4380	361	8%

The Actual Mortality Rate of 8% is below the Range of Predicted Mortality Rates for All Causes.

Christ Hospital exceeded the Range of Predicted Mortality Rates in only one diagnostic category - Severe Acute Heart Disease. Our records indicate significantly more Medicare cases in this category, with a lower Actual Mortality Rate. A comparison of the Medicare Mortality Report and actual data from Christ Hospital is as follows:

Severe Acute Heart Disease

	Admissions	Deaths	Actual Mortality Rate
Medicare Mortality Report	57	31	58%
Actual Christ Hospital	106	31	29%

The Actual Mortality Rate of 29% is within the Range of Predicted Mortality Rates for Severe Acute Heart Disease. All of these deaths had been reviewed in 1986 as part of our mortality review. They have now been reviewed again by our Cardiology Department and Quality Assurance Department.

The review identified no deviations from accepted treatment standards. All of the patients were severely ill, with an average of 77 years of age.

Christ Hospital shares in the search for meaningful measures of quality care. We hope that the final publication will contain meaningful public information.

Sincerely,

Lloyd R. Currier

Lloyd R. Currier
President

LRC:jr

cc: New Jersey Hospital Association
American Hospital Association

CLARA MAASS MEDICAL CENTER

Hospital in the Park on the Newark-Belleville Line

FRANKLIN AVENUE • BELLEVILLE, NEW JERSEY

(201) 450-2000

Recent Medicare mortality figures have been compiled and released by the Healthcare Finance Agency (H.C.F.A.) to the public. Clara Maass Medical Center welcomes the opportunity to comment on the Health Care Finance Agency (HCFA) mortality figures. We believe certain areas of the report need to be clarified and certain facts about Clara Maass Medical Center must be known in order that the report be interpreted properly.

Clara Maass Medical Center historically has been in existence for over 100 years. It has been situated in Belleville, New Jersey, since 1957. It is a 575 bed non-profit voluntary hospital with a broad range of basic services. There has been and still is, a strong sense of commitment to community services. An important, ongoing function within the hospital is a strong hospital-wide Quality Assurance program which monitors the quality of patient care.

It is extremely important to be aware that mortality figures are not the major method of determining the appropriateness of care given by a physician or an institution. Many factors must be considered. The severity of illness (how sick is the patient) is obviously important when outcome (Death) is to be considered as in the HCFA study. The HCFA study was based upon statistics taken from the Medicare bill. This bill reflects a diagnosis which was the "reason for admission" but not the "cause of death".

The use of statistical analysis causes great concern to both physicians and hospitals when it is used as a method to attribute the death of the patient to the care provided by the hospital. Statistics, numbers, without being aware of the severity of patient illness or of the type of patient which is referred to a community hospital, are inappropriate to use as a guideline for consumer evaluation of a hospital. The statistical techniques used in this documentation may not be familiar to the general public and therefore the information will be open to misinterpretation. The fact is that a hospital cannot be judged simply on mortality data but must be judged on broader patient care concerns.

Patients in communities throughout this country have many similarities; however, in many aspects they differ. What is "normal" in the Belleville area, the age, general health status, psychological condition and family support, prior to the hospitalization, must be considered and do affect mortality. For example, cancer rates in Bergen and Essex County are the highest in the state of New Jersey. The average age of Essex County residents is also greater than the national norm.

Since receiving the report in September 1987, a number of people at Clara Maass Medical Center have had the opportunity to review the data:

1. Our Vice President of Medical Affairs and Quality Assurance Consultant have reviewed the record of every death in the diagnostic category in which the death rate exceeded the HCFA mortality range.

2. The findings were discussed with a panel of physicians and health care professionals who were convened for the sole purpose of reviewing these findings, along with the appropriate medical records.

Based on this comprehensive review of HCFA's data and the specific medical records involved, we think the public will be interested in the following findings:

1. Reviewing the statistics, it appears that Clara Maass Medical Center has a death rate exceeding the HCFA expected mortality ranges in the metabolic/electrolyte (ME) category. This diagnostic category includes the admitting diagnoses of dehydration, depletion of volume of plasma or extracellular fluid, and a variety of illness associated with the adrenal glands. Review of the medical records revealed that all but one case identified by HCFA were admitted with a diagnosis of dehydration. In reality, the "cause of death" in at least 50% of these cases was underlying advanced malignancy.

2. As was previously stated, Essex County has an extremely high rate of cancer in comparison to the State of New Jersey and the Nation. Clara Maass Medical Center is a major Cancer Referral Center for the County, receiving and treating many patients with the diagnosis of advanced malignancy. There are governmental guidelines which address the coding (assignment of numerical values to diagnoses and procedures) which when followed, have placed terminally ill patients in categories other than the malignancy which was the true cause of death.

3. Many of the other deaths were in patients with chronic, long-standing cardiac, and pulmonary disease whose average age was close to 80. Again this reflects the higher than average age of Essex County residents when comparing this data to the national norm. It should be noted that New Jersey has the second oldest population in the nation. Of particular concern is whether this was taken into consideration when these statistics were compiled.

Clara Maass Medical Center has always prided itself on providing excellent health care services to its surrounding community. While we appreciate HCFA's concern toward quality of care, we believe that the data currently released should be met with an understanding that statistics alone do not reflect the quality of services provided by any Health Care institution.

In our desire to provide optimal quality care, Clara Maass Medical Center has, and shall continue to, utilize every available resource to accomplish this mission.

Clara Maass Medical Center would like to thank our community for their ongoing support, and for affording us the opportunity to serve them.

Columbus
Hospital

495 NORTH THIRTEENTH STREET • NEWARK, NEW JERSEY 07107-1397 • (201) 268-1400

October 19, 1987

Medicare Provider Number: 310093

HCFA
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sir:

In response to the 1986 Medicare mortality rate, as calculated by the Health Care Financing Administration, Columbus Hospital, located in Newark, New Jersey would like to make the following comments:

As would be expected for an acute care, community hospital, Columbus Hospital has fallen within the "predicted" range of mortalities in all categories. Upon verification of the expiration case listing provided to us, we find the two percent mortality rate listed for orthopedic cases to be misleading. This percentage is attributable to two cases and the methodology utilized by HCFA. In the first case, the patient was admitted with a pathologic bone fracture which was due to the underlying metastatic carcinoma. The second case, classified as an orthopedic mortality, was an 87 year old patient who was admitted for spondylosis and subsequently developed a cerebral hemorrhage. Clearly, these cases would be more appropriately placed in a different category.

The Health Care Financing Administration has included patients who expired within 30 days after discharge in their mortality rate calculation. Of the ten cases identified by HCFA, for this category, one patient has an erroneous expiration date and, in fact, expired in Columbus Hospital. In another case, the patient was transferred to a neighboring hospital for a cardiac catherization and subsequently expired. This patient was erroneously included in Columbus Hospital's Medicare mortality rate. Therefore, only 8 patients expired within 30 days after discharge.

Based upon the above data inadequacies which have been identified only from the case listing of expirations provided, one must question the usefulness of this mortality data. It has been stated that mortality rates are one indicator of the quality of patient care rendered but if the basic data used in the statistical model and calculations are erroneous, one cannot consider HCFA's

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

mortality rate as a true indicator of patient care rendered.

The Columbus Hospital Medical Staff, as part of its ongoing evaluation of patient care, performs peer review of hospital mortalities. This in depth review of the individual patient's medical record and the causal factors leading to the patient's demise provides a valid picture of the quality of patient care rendered which cannot be accomplished through the review of a statistical report.

Sincerely,

Carl Porcaro, M.D.
Director,
Department of Medicine

CP/pf
Enc.

Community Memorial Hospital

HIGHWAY 37 WEST • TOMS RIVER, NEW JERSEY 08753 • 349-8000 Area Code 201

ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

Medicare Provider Number 310041

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Community Memorial Hospital welcomes this opportunity to comment on the data released by the Health Care Financing Administration (HCFA). Since receiving HCFA's report on September 23, a committee comprised of representatives from the medical staff, quality assurance, medical records and finance have reviewed the data using a multidisciplinary approach similar to our standard, continuous review of all hospital mortalities.

We are pleased that the HCFA report shows that Community Memorial Hospital's overall mortality rate is within the expected range. This is especially pertinent because our hospital treats a high geriatric population, 46 percent of whom fall into the category of the "older geriatric", 75 years and older. However, we disagree with the methodology used by HCFA, especially the discounting of multiple admissions for patients. The Peer Review Organization (PRO) of New Jersey, on the other hand, also released the results of its study of hospital mortality rates which clearly shows that Community Memorial Hospital's range is even better than that reported by HCFA. It should be noted that both HCFA and the PRO used the same data base, yet the results of the two studies are dissimilar.

- The PRO used 63 independent variables, almost twice as many as HCFA used.
- The PRO used data for all hospitalized patients in New Jersey to determine incidence rates of various diseases in various regions of the state which could affect hospital data.
- The PRO considered from where a patient was admitted: home, nursing home or another hospital.
- The PRO also considered whether a death occurred at the hospital or at another place.

THE PATIENT IS OUR PURPOSE

According to HCFA, Community Memorial Hospital's Medicare admissions in 1986 were 5,904. Using HCFA's methodology, we arrived at a total of 8,717. If the readmissions were subtracted, as HCFA stated it has done, our total would be reduced by 2,164 to 6,553. Based, then, upon a total of 6,553 Medicare admissions in 1986, our overall mortality rate for all causes of death would decrease.

While we concur with HCFA's contention that "the public has a right to know", we feel that releasing mortality statistics without an explanation of possible pertinent factors, such as secondary contributory causes, may lead to a misinterpretation of the data and cause confusion and undue concern to the general public. This confusion is further compounded with the publication of both the HCFA and the PRO reports.

In order to verify the accuracy of the data used by the HCFA and the PRO and to clarify the information and determine its relevance, we have done our own examination. Our results more closely coincide with the PRO's.

Based upon a comprehensive review of the HCFA data and the specific medical records which form the basis for the report, it is apparent that the data does not fully address the severity of illness component. To assess mortality data appropriately, other factors which affect mortality need to be taken into account. Contributing factors include associated diseases which a patient may be experiencing.

For example, the mortality rate for the metabolic/electrolyte diagnostic category fails to show the number of patients who were admitted to the hospital with associated life-threatening diseases such as advanced malignancies. Many had been admitted at critical stages of their disease. Viewed against a background of patient mix, geographic considerations and specialized services, for example, mortality rates alone do not determine the quality of care. Nor do they explain why the rates may be higher or lower at different hospitals. In many admissions, there is a greater likelihood of mortality when the disease is accompanied by complicating conditions.

- Community Memorial Hospital, a 460-bed regional medical center, is the largest of Ocean County's five hospitals. According to the Ocean County Office on Aging, there are more than 40 retirement communities and 20 nursing homes situated here.

- Community Memorial Hospital's Medicare days are, by far, the highest in the State of New Jersey for a single hospital.

- Community Memorial Hospital's Emergency Center is one of the busiest in the state. In 1986, our Emergency Center visits totaled 50,543.

- Patients admitted from the Emergency Center and from nursing homes are generally high risk patients.
- Approximately 50 patients are admitted to Community Memorial Hospital each month from nursing homes.
- Additionally, Community Memorial Hospital provides many specialized services on a regional basis. Our dialysis and cancer treatment centers draw patients from a broad geographic area because of the progressive technology that our hospital offers.

We want to emphasize that Community Memorial Hospital's ongoing quality assurance program provides a constant review of patient care to assure high standards and identify possible areas of improvement.

In conclusion, we would like to thank HCFA for the opportunity to present this response. Community Memorial Hospital has maintained a tradition of excellence in its 26-year history and our commitment is to abide by the strictest standards to insure that the tradition continues.

John Kengeter, M.D.
Vice President for
Medical Affairs

JK/11

Cooper Hospital/University Medical Center
One Cooper Plaza • Camden, New Jersey 08103
(609)342-2000

Cooper Hospital/University Medical Center
Medicare Provider # 310014

Response to Health Standards and Quality Bureau
Health Care Financing Administration

Cooper Hospital/University Medical Center is a major university teaching center and a core affiliate of the University of Medicine and Dentistry of New Jersey. It has emerged as the tertiary care referral center for the entire Southern New Jersey region. As a medical school hospital, patients are referred to Cooper by physicians and community hospitals throughout Southern New Jersey because of the recognition that Cooper, and Cooper alone, is able to treat the region's most critically ill and seriously injured patients. Cooper's commitment to excellence, in the provision of health care services, is unrivaled in the industry. We applaud the Health Care Financing Agency (HCFA) for assisting the public by clarifying quality of care with this report.

Two points should be underscored. First, mortality rates are not adequate, by themselves, to define quality of care. Our medical staff works continuously at monitoring the practice of medicine at Cooper. We constantly ensure that state-of-the-art techniques, as well as sound medical judgement and skills, are utilized to provide the best quality care possible. We also deliver this care with compassion and understanding. Secondly, this current generation of statistical modelling of nationwide Medicare mortality data does not adequately and completely take account of the severity of patients' illnesses. While the model used accurately categorizes each patient's illness or disease, it does not measure the seriousness or extent of the disease. For example, two patients can be diagnosed as having the same medical condition, but the degree and severity of their illnesses can vary markedly.

It is essential that the public better understand the provision of hospital services, and towards that end, the Peer Review Organization of New Jersey (PRO) has worked with the Health Care Financing Agency (HCFA) and provided further study updating HCFA's analysis of hospital-specific mortality rates. The PRO is certified by the State Department of Health and the Federal Government to oversee the quality of care provided to hospitalized patients in New Jersey. It reviews medical practices to insure that patients receive the quality of care that is both necessary and appropriate. The PRO's study of the mortality rates at Cooper uses a similar statistical model as HCFA, but possesses a higher degree of statistical confidence because the model incorporates indicators of the severity of illness among hospitals' patients. The PRO's study also employs a more rigorous definition of mortality rates by including deaths up to 30 days after discharge from hospitals in their study of all New Jersey hospitals. The HCFA definition only includes deaths occurring up to 30 days after admission to hospitals. Finally, the PRO's study includes all Cooper's Medicare patients for 1986 whereas HCFA's study only included sixty one percent (61%) of Cooper's Medicare patients.

The updated study indicates (see table below) that Cooper's overall mortality rate for Medicare patients was 10.2% and within the range of expected rates for our patients. Likewise, Cooper's performance was well within the range of expected rates for every clinical category. We will continue to provide the best quality of care in serving our public.

Cooper Hospital/University Medical Center

One Cooper Plaza • Camden, New Jersey 08103
(609)342-2000

UPDATED STUDY

PROJECTED MORTALITY RATES

ANALYZING ALL COOPER'S MEDICARE ADMISSIONS FOR 1986*

DIAGNOSTIC CATEGORY	MEDICARE PATIENTS ADMITTED	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES	
OVERALL	4155	10.23	8.80	11.23
CA - CANCER	582	20.10	16.56	25.74
CE - CEREBROVASCULAR ACCIDENTS	102	27.45	13.21	30.86
EY - OPHTHALMOLOGIC DISEASE	21	4.76	00.00	00.00
GC - GASTROINTESTINAL CASTROPH.	99	18.18	11.29	27.06
GI - GASTROINTESTINAL DISEASE	318	3.77	2.68	6.22
GU - UROLOGIC DISEASE	203	4.43	2.60	9.81
GY - GYNECOLOGIC DISEASE	28	00.00	00.00	00.00
HE - SEVERE HEART DISEASE	338	15.68	13.89	18.62
ME - METABOLIC/ELECTROLYTE DIS.	66	22.72	11.24	27.08
OP - ORTHOPEDIC DISORDERS	219	6.84	2.67	9.17
PN - PULMONARY DISEASE	203	17.73	12.52	23.62
RN - RENAL DISEASE	49	16.32	8.75	24.97
SE - SEPSIS	31	36.66	21.46	58.28
TR - SEVERE TRAUMA	31	19.35	7.67	43.15
DE - DERMATOLOGY	42	00.00	1.50	11.00

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*STUDY CONDUCTED BY PEER REVIEW ORGANIZATION OF NEW JERSEY (PRO). ANALYZES ALL COOPER HOSPITAL'S MEDICARE PATIENTS FOR 1986. STUDY EMPLOYS A STATISTICAL METHODOLOGY SIMILAR TO HCFA'S AND INCORPORATES INDICATORS OF SEVERITY OF ILLNESS.

DEBORAH HEART AND LUNG CENTER: RESPONSE TO HCFA DATA

The Deborah Heart and Lung Center is a fully accredited specialty referral center for the diagnosis and treatment of heart and lung diseases. As a teaching hospital, Deborah has affiliations with the University of Pennsylvania, Thomas Jefferson University, and the Robert Wood Johnson School of Medicine. Drawing its patients primarily from New Jersey, New York, Pennsylvania and Florida, Deborah is proud of its 65 year-old policy of providing top-quality care at no cost to the patients, accepting third-party reimbursements when available.

Approximately 35 percent of admissions to the Center are paid by the Medicare system. The mortality statistics released by the Health Care Financing Administration refer only to this group of patients. In 1986, Deborah admissions totaled 4,986 in all age groups.

In an active, overall quality assurance and risk management program, mortality data are but one parameter. It serves as one of many important variables which must be evaluated to assess the overall quality of care provided by an institution and its medical staff. When evaluating mortality information the severity of the primary illness, the importance of co-existing illnesses, social factors, and risk factors are also important variables. The data from HCFA does not include information about these factors.

The Center's major emphasis during the last 30 years has been the diagnosis and treatment of heart disease, most especially congenital, coronary artery, and valvular disease. A significant percentage of our patients have had previous surgery and come to Deborah for their second or third open heart procedure. Nine of the patients listed under Low Risk Heart Disease and under All Others had prior open heart surgery. Another group has multiple valve disease, multiple coronary vessel disease, or a combination of both. All open heart surgical procedures are included in this Low Risk Group regardless of the number and combination of valvular and coronary disease. Of the 48 patients listed under Low Risk Heart Disease, 32 patients had open heart surgery. Fifteen had bypass surgery; nine had at least four bypasses, the remaining had two or three bypasses. Six patients had aortic valve surgery, one of which has associated coronary artery and tricuspid valve disease. Of the 11 patients who had mitral valve surgery, all had associated tricuspid valve disease, coronary artery disease, or a combination of both and two of 11 had prior mitral valve surgery. Also included in this group were 13 patients who were too sick to have surgery, two with an infection of their heart, and one with severe disturbances of his heart rhythm.

The Health Care Finance Administration lists all open heart surgeries under the category of Low Risk Heart Disease. In a recent communication, The Society of Thoracic Surgeons points out that good risk patients now undergo balloon angioplasty, and that even patients with acute myocardial infarction undergo angioplasty. This is increasingly true at Deborah, where 203 angioplasties were performed in 1986. Therefore, patients who require open heart surgery are those for whom less extreme therapy is not an option and for whom there is an increased risk. The Society also recognizes that advanced age, reoperation, emergency operation and associated diseases are major risk factors which increase risk. None of these are used by HCFA to differentiate patients in this group.

The Pulmonary Department of Deborah provides only diagnostic care to patients with lung cancer. The Center does not provide therapy or long-term care after the diagnosis has been made. The patient is then referred to another facility for therapy. Hence, the lower than expected mortality rate for cancer patients at Deborah.

Because the Deborah Heart and Lung Center does not have an Emergency Room and is not in close proximity to a general medical-surgical facility, the Center does not receive a large number of patients with acute myocardial infarction, ruptured aneurysms, or with severe exacerbations of their pulmonary disease. The numbers of patients in each of these categories are low and the mortality rate is also low.

Deborah welcomes the opportunity to comment on the Medicare patient mortality rates as released by HCFA, recognizing these figures not as indicators of overall quality, but rather as a reflection of Deborah's experience only with Medicare patients for 1986.

Dover General Hospital & Medical Center
Jardine Street • Dover, NJ 07801

October 22, 1987

William L. Roper, M.D., Administrator
Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Medicare Provider Number: 310067

Dear Dr. Roper:

On behalf of Dover General Hospital and Medical Center, I appreciate the opportunity to comment on the mortality data you sent us. Upon careful review, we find that the mortality data for Medicare patients in our hospital in 1986 that you forwarded to us are correct and that our actual mortality rate falls within the predicted range. We recognize that mortality rates are but one of the many factors by which quality of care may be evaluated. We further recognize that your report was limited to Medicare patients.

Dover General Hospital is a 360-bed, not-for-profit acute care community hospital with both traditional and specialized services. The hospital is licensed by the State of New Jersey, fully accredited by the Joint Commission on Accreditation of Hospitals, and is a member of Voluntary Hospitals of America (VHA), a national network of more than 630 leading, locally owned hospitals and 150 of their affiliates. It is governed by a voluntary Board of Trustees.

Dover General Hospital strives to assure quality patient care by requiring an ongoing, hospital-wide quality assurance program. As part of that program, clinical and administrative staffs monitor and evaluate the quality and appropriateness of patient care and clinical performance, resolve identified problems and report information to the medical staff, administration, and the Board of Trustees. The goal is to assure improvement or resolution of identified problems for the purpose of providing better patient care.

Again, thank you for sending us the data and inviting our comments. Even though your study was confined to Medicare patients and severity of illness was not incorporated in the data, we were able to use your report as an occasion to further evaluate and confirm the high quality of Dover General Hospital's services and programs.

Very truly yours,

Leonard V. Gorson Jr.

Leonard V. Gorson
Assistant Vice President
Planning & Marketing Services

lmb

EAST
ORANGE
GENERAL
HOSPITAL

October 27, 1987

William L. Roper, M.D.
Health Care Financing Administration
The Administrator
Washington, D.C. 20201

Dear Dr. Roper:

I am writing in response to your letter of September 21, 1987, concerning the Health Care Finance Administration plans to publish selected mortality information about East Orange General Hospital and all other short-term acute care hospitals which treated Medicare patients in 1986. Since this information is subject to misinterpretation, I appreciate the opportunity to address the accuracy of the information that is proposed for publication regarding this hospital, as well as to be on record in stating my concerns with the publication of hospitals' specific mortality information.

In reviewing your East Orange General Hospital mortality data, it is evident that in all of your categories this hospital is within the norms for all of your established mortality rates. Your data was thoroughly reviewed by the Medical Records Department and the Medical Staff and found to be accurate except in the case of two (2) patients which you report died within thirty (30) days of their discharge from this hospital. According to our medical records information, both patients had subsequent hospitalizations here after the dates of death reported in your data. I am returning a copy of your data with those patients noted.

While I am pleased that according to HCFA's model, the mortality rates for Medicare patients at this hospital are within the norm, I believe that it is also important to express my concern with the publication of hospitals' specific mortality information. The evaluation of the quality of patient care is a complicated process that cannot be reduced to a simple statistic. Even though the HCFA model has improved since last year by its consideration of a variety of patient characteristics, several critical variables continue to be absent from consideration. Severity of illness, socio-economic factors, the general health of the patient prior to hospitalization, the case mix regarding

300 CENTRAL AVENUE, EAST ORANGE, NEW JERSEY 07019 • 672-8400

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

emergency room admissions or transfers from nursing homes, are but a few of the variables that may significantly effect the hospital's mortality rate and these are absent from consideration in HCFA's model. Without these factors included, the reliability and the validity of the HCFA mortality data are questionable. In order to address these factors and to be in a position to make a judgement regarding the quality of care, a review of the medical record is required. Yet, there will be a tendency on the part of some to accept your mortality rates as the measure of quality for hospital care.

As you are aware, the American Hospital Association and the Joint Commission on Accreditation of Hospitals regard the evaluation of quality care as a priority. Hospitals, such as East Orange General, devote considerable time and effort to reviewing the quality of patient care that is provided not only to Medicare patients, but to all patients. Quality review mechanisms in medical staffs and hospital departments assure that problems are identified and addressed in a timely manner. It is through these activities that quality judgements may be made and the public may be assured that quality hospital care is available to them.

Sincerely,

Laurence M. Merlis
President

/gwm

ELIZABETH GENERAL
EGMC
MEDICAL CENTER

925 East Jersey Street
Elizabeth, New Jersey 07201
(201) 289-8600

GEORGE F. BILLINGTON
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Senior Vice President
Chief Operating Officer

RICHARD ENGLISH
Secretary

JAMES GILLIN, Ph.D.
Treasurer

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Medicare Provider # 310027

Dear Dr. Roper,

This letter conveys the comments of Elizabeth General Medical Center to the Health Care Financing Administration regarding the release of Medicare mortality data.

Since receiving the data on September 23, 1987, it has been reviewed by a number of key Medical Center staff. Some minor discrepancies in the data are noted as follows, with specifics attached in Appendix A:

1. Four patients were assigned to the wrong diagnostic categories.

2. Three patients were assigned incorrect dates of death.

3. One patient was assigned the wrong admission date and wrong discharge date.

The Elizabeth General Medical Center has a strong and effective quality assurance program involving administration, medical, nursing and support staff. Program participants undertake a constant and indepth review of appropriate aspects of patient care including a review of mortality data. In addition, Elizabeth General consistently meets the rigorous quality standards set forth by the Joint Commission on the Accreditation of Health Care Organizations.

As a result of its extensive experience in quality assurance, the Medical Center's staff recognizes that an accurate assessment of quality can be made only after considering the broadest range of factors which may affect the patient care setting. One set of data, in this case, Medicare Mortality Statistics cannot be used alone as a measurement of quality. Mortality data may be significantly influenced by the population served, for example, patient age and socio/economic background are two factors which historically impact upon the incidence of mortality.

Elizabeth General Medical Center is a 368-bed, private, non-profit, voluntary medical center. Our location and range of services reflect a strong commitment to a higher risk population. The Medical Center's location in Union County, New Jersey, places it in the fourth "oldest" county in a state which has the second highest national median age. Elizabeth General's percentage of Medicare discharges, 21%, is significant when one considers that maternity, pediatric and children's psychiatric discharges are included in our overall number of total discharges. A growing demand for critical care beds in the Medical Center's service area prompted a renovation and expansion of the intensive care unit which was completed this year. In 1986, Elizabeth General served more acutely ill patients than during any year in our 109-year history. An active cancer program, which includes a 34-bed inpatient unit, serves a large number of patients afflicted with this life threatening disease. Meeting the health care needs of the area's indigent population is a long-standing tradition of the Medical Center, which provided 19% of its total 1986 inpatient activity to the sick poor. The greater Elizabeth community serves as a hub for transportation and industry and, as such, has come to rely heavily upon Elizabeth General for emergency services. Last year, the Medical Center treated nearly 40,000 emergencies.

Thank you for the opportunity to present this response.

Sincerely,

George F. Billington
President

/njk

Attachment

ELIZABETH GENERAL
EGMC
MEDICAL CENTER

925 East Jersey Street
Elizabeth, New Jersey 07201
(201) 289-8600

Appendix A

The following discrepancies were noted in the Health Care Financing Administration mortality data submitted to Elizabeth General Medical Center, I.D. #310027:

1. Patient placed in the wrong diagnostic category according to ICD-9 coding:

Patient I.D.#	From	To
[redacted]	CA	OP
[redacted]	HM	PN
[redacted]	ME	SE
[redacted]	PN	GI

2. Patients assigned the wrong date of death:

Patient I.D.#	From	To
[redacted]	1/31/86	1/24/86
[redacted]	10/31/86	10/21/86
[redacted]	1/31/86	1/21/86

3. The patient's last admission in 1986 was not cited. Correct information is as follows:

Patient I.D.#	Adm. Date	Disch. Date	Death Date
[redacted]	7/7/86	7/15/86	7/15/86

ELMER COMMUNITY HOSPITAL

WEST FRONT STREET • ELMER, NEW JERSEY 08318 • (609) 358-2341

GERALD A. KRAMME
PRESIDENT BOARD OF TRUSTEES

JOHN H. WISDA
ADMINISTRATOR

October 27, 1987　　　　Medicare Provider # 310069

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services

Dear Dr. Roper:

In reviewing the statistics you have sent concerning the mortality information for our hospital, we have found the following things we would like to bring to your attention.

One case listed as a gastrointestinal disease was found in reality on the death certificate issued revealed a death due to myocardial infarction.

In another instance a case listed as sepsis, in which we were found to be in the high percentile group, in reality the death was due to lymphoma. This would change our listed percentile since only four cases were considered in this group.

Because we have found discrepancies in these categories, we feel there are other cases in which the cause of death was not as listed. Since time does not permit us to review all the cases, we wish to go on record showing our disagreement with the overall reported results.

Sincerely,

John H. Wisda　　　　Joseph A. LaCavera, DO

John H. Wisda
Administrator

Joseph A. LaCavera, D.O.
Medical Director

EH
ENGLEWOOD HOSPITAL • 350 ENGLE STREET • ENGLEWOOD, NJ 07631 • (201) 894-3000

John P Swanson
Chairman, Board of Trustees

Ronald C. DeMatteo
President
Secretary, Board of Trustees

October 26, 1987

Dr. William Roper
Department of Health and Human Services
P.O. Box 26684
Baltimore, Maryland 21207

RE: HOSPITAL MORTALITY INFORMATION

Dear Dr. Roper:

In response to the data presented on Medicare predicted mortality rates in short term acute care hospitals I would like to take this opportunity to comment on the Cancer death rate at Englewood Hospital. Our hospital had an actual mortality rate of 29% in a predicted range of 10 to 24%.

Englewood Hospital is a Community Cancer Center receiving referrals from other health care facilities as well as from a very active Hospice Program which serves in excess of 200 clients/families per year. We are also a diagnostic and treatment center for cancer so that we admit clients on several occasions before their final admission for terminal care.

Some deaths, occurring post discharge represent clients who have returned to our Home Care Hospice Program following a period of respite in the hospital setting. There are no free standing Hospice facilities in our geographic area and therefore the hospital serves this purpose for some clients who have no support groups or family to sustain them in their terminal illness.

Sincerely,

Ronald C DeMatteo

Ronald C. DeMatteo
President

Freehold Area Hospital

WEST MAIN STREET • FREEHOLD, N.J. 07728 • 201-431-2000

Hospital Provider - 310111

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Administrator:

Our institution has received from you selected mortality information for our medicare admissions in 1986. This information has been reviewed by multiple hospital disciplinaries.

In our review, some discrepancies with the data were noted; specifically, in death vs. discharge dates and patient ages.

It is our feeling that statistical information of this nature can be an excellent educational tool, but only with in-depth analysis can this information be utilized as a true indicator of quality care.

To perform this analysis, our institution has a mortality committee which, as an integral part of a quality assurance program reviews all expirations. The committee's findings are disseminated to the appropriate individuals/departments within the hospital structure. We have found this approach extremely successful in maintaining a high level of quality in our patient treatment and care.

Sincerely,

Jack Burns
Vice President

Hackensack Medical Center

HACKENSACK MEDICAL CENTER

Response to HCFA 1986 Mortality Data Release

Medicare Provider Number: 310001

Although we were in the "expected ranges" in all categories according to the HCFA data, it must be pointed out that the results cannot be used as a valid measure of hospital performance. Mortality review is an integral part of our own internal Quality Assurance Program but it is only one part of a multi-faceted ongoing program of patient care review which goes beyond the mere examination of data.

We also feel there are some flaws in the data as presented. Some of these are:

- --The total number of 1986 Medicare cases HCFA reported (4,308) does not agree with our records (6,399).
- --The severity of illness was not accounted for in the methodology used to calculate expected ranges.
- --The HCFA classifications of Mortalities do not always reflect the actual cause of death. For example, the majority of our deaths classified as "metabolic" were patients with metastatic cancer who died because they succumbed to the end stages of this disease, not merely from a metabolic imbalance.

In conclusion, we believe that HCFA has a responsibility to fully inform the public about this data. This includes informing the public that the data is flawed and that data alone, even if perfect, cannot be used to draw conclusions about the quality of care in a hospital.

Hackensack Medical Center 30 Prospect Avenue Hackensack New Jersey 07601 201.441.2000
Affiliated with the University of Medicine and Dentistry of New Jersey

hackettstown community hospital

651 WILLOW GROVE STREET • HACKETTSTOWN • NEW JERSEY 07840-1798 • PHONE (201) 852-5100

October 22, 1987

William L. Roper, M.D., Administrator
Department of Health & Human Service
Health Care Financing Administration
Washington, D. C. 20201

Dear Dr. Roper:

In considering this data, it is important to note the following:

1. Only the last admission of a patient was counted in the statistics.
2. Twenty percent of these patients expired outside of the hospital.
3. New Jersey serves the second largest geriatric population in the nation.
4. Severity of illness factor was not considered.

While Hackettstown Community Hospital's statistics compare favorably with the HCFA guidelines, we do not feel this information adequately reflects the quality of care given by any hospital and we will continue to monitor all deaths through our Quality Assurance Department.

Sincerely yours,

Gene Milton

Gene C. Milton, President &
Chief Executive Officer

db

HAMILTON
HOSPITAL A DHS AFFILIATE

310 110

October 26, 1987

William L. Roper, M.D. Administrator
Health Care Financing Administration
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for the opportunity to respond to H.C.F.A.'s release of Medicare mortality rates.

As you know, the Peer Review Organization of New Jersey will be releasing similar mortality data next month. We have attempted to reconcile our internal data with both H.C.F.A.'s and P.R.O.'s data. Since there are inconsistencies between the three sets of data, it is difficult to assess our true status in any diagnostic category.

Despite the inconsistencies, comparative outcome data such as these mortality rates are helpful in focusing our Quality Assurance activities. We review mortalities and other adverse occurrences on an ongoing basis as part of our Quality Assurance program. Utilizing the statistics provided by H.C.F.A., we will now enhance our Quality Assurance program by determining on an ongoing basis where we stand relative to statistically predicted mortality rates and take action as necessary.

Based on H.C.F.A.'s mortality data, Hamilton Hospital's overall Medicare mortality rate (13%) was just below the midpoint of the predicted range (13.5%). Additionally, for each of the sixteen diagnostic categories, our mortality rates were within the predicted ranges.

It was noted in the review of H.C.F.A.'s data that the admission database is incomplete. Since the mortality rates are calculated as the number of deaths divided by the number of admissions in each category, an incomplete admissions database produces excessively high mortality rates.

For example, in the Renal Disease category, all of our deaths, but only half of our admissions, were included in the mortality rate calculation. Based on the mortality and admissions data used by H.C.F.A., our mortality rate in that category was 57%. However, our renal disease mortality rate was only 9% according to the Peer Review Organization, which finalized its admissions database several months later than H.C.F.A.

HAMILTON CENTER FOR HEALTH Whitehorse-Hamilton Square Road Hamilton New Jersey 08690 (609) 586-7900

H.C.F.A.'s model also does not take into consideration the severity of patients' illnesses upon admission to the hospital or the timeliness of their admission. For example, a significant factor is our data which is not included in the model is the fact that one-third of the Medicare patients who died in the hospital were nursing home residents.

Because we do not have access to Social Security data to verify deaths after discharge, and because it is impossible for us to simulate H.C.F.A.'s statistical outcome, our ability to verify the accuracy of the statistics is limited. We can only verify the data on patients who expired in the hospital. To the extent that we were able to verify it, the mortality data included in H.C.F.A.'s model was generally found to be more accurate than the admission data. Minor discrepancies were noted in patients' age, sex, and date of death. For one case, all of the data listed pertained to a previous, rather than the last hospital admission. Other deaths were not included at all.

Again, thank you for the opportunity to comment on this mortality rate data. If you, or anyone receiving this material, have additional questions, please do not hesitate to call us.

Sincerely,

J. Austin White
President

ss

1887 1987
100 YEARS OF HEALTHCARING
Helene Fuld
MEDICAL CENTER

October 27, 1987

Mr. Harvey Brook
HCFA
Room 2-D-2
Meadows East Bldg.
630 Security Blvd.
Baltimore, MD 21207

re: Hospital Medicare Provider No. 310092

Dear Mr. Brook:

Helene Fuld Medical Center is pleased to have this opportunity to respond to your efforts to develop meaningful information regarding outcomes experienced by the patients it has served. Your rightful concern for the quality of medical care provided by hospitals throughout the country is deeply shared by our medical center. Indeed, we have dedicated an ever increasing share of our scarce resources to develop and expand upon an internal system of monitoring the care given all patients to assure the effectiveness of our services and those of our medical staff.

While our commitment to quality, however defined and measured, is steadfast we are concerned that this elusive concept may be simplistically represented and then misunderstood or misrepresented to the public. Perhaps this is the natural fate of any notion as it evolves toward a final consensus and eventual societal agreement. So it is then that we encourage your further development of a system of measurement which considers functional outcomes of all patients.

To assure meaningful and helpful data for healthcare consumers is a massive undertaking and responsibility. For our part, we pledge our continued efforts to provide and monitor services which reflect our intense commitment to quality healthcare.

Sincerely,

William K. Hogan

William K. Hogan
Chief Executive Officer

WKH:lak

Helene Fuld Medical Center • 750 Brunswick Avenue, Trenton, New Jersey 08638 • (609) 394-6000

HOLY NAME HOSPITAL
718 Teaneck Road
Teaneck, NJ 07666 (201) 833-3000

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sirs:

Holy Name Hospital has had an opportunity to review the mortality statistics forwarded to it by your agency.

Our Administration and our Board both firmly believe that all persons have a right to receive the highest quality of health care services from their physicians and their hospitals.

Insuring the quality of health care is the most urgent obligation undertaken by any health care institution. Because of this belief, our hospital has traditionally maintained an extremely active quality assurance program. We review all deaths which occur within our hospital. In addition, we routinely monitor for the occurrence of over 50 adverse occurrences to insure that no departure from accepted standards of care has occurred.

Because of our familiarity with quality assurance techniques we regret that HCFA has chosen to release what we consider "raw data" to the public. We believe that the data as presented will confuse rather than educate the public and sensationalize rather than advance the process of peer review and quality assurance.

Our hospital produces data similar to the HCFA data on a routine basis. This data is used, however, as the first step in our internal quality assurance process. We recognize that "mortality", "complication", or any other statistical rates which we can generate do not, by themselves, tell much about the quality of care our doctors or our hospital renders. The rates merely point to areas which require further analysis and investigation by our internal administrative and medical staff committees. It is only through this peer review process that our hospital makes determinations concerning particular episodes of care and whether such care was rendered in conformity with accepted standards of health care practice.

People Caring For Life.

We hope that HCFA, as it refines its quality assurance activities in the coming years, will focus more on supporting such peer review activities and less on the dissemination of statistical data.

It would be inappropriate for our institution to comment on the statistical validity of the model constructed by HCFA to assess "expected" mortality rates. However we believe it is appropriate to make the following comments:

1. We note that our experience is well within the norms as defined by the HCFA model. (Although we continue to observe that no conclusion--positive or negative--can be drawn from this fact).

2. Our hospital has one of the largest dialysis programs in the state of New Jersey. Accordingly, we treat a higher case-load than expected of severely ill patients. For example, in the various diagnostic categories analyzed in the HCFA statistics, the mortality contribution of patients with end-stage renal disease comprised from 10 to 25 percent of the total.

3. The total Medicare cases presented in your statistics are less than 66% of our total Medicare admissions. HCFA analyzed the experience of 3030 of our Medicare admissions in 1986; Holy Name Hospital treated approximately 4568 Medicare beneficiaries during that year. This difference clearly skews the statistical results generated.

4. Any statistical analysis of mortality data is hampered by the current lack of a valid system to account for severity of illness. For example, we found that the average age of the patients who died in the HCFA sample was 78.2. These patients--virtually without exception--were suffering from end-stage, multi-system diseases. For example, in the category of strokes we found that 15% of the patients were simultaneously suffering from disseminated carcinoma. Similarly, of the sample of cases we were able to review in the category of metabolic diseases, 46% suffered from disseminated carcinoma and an additional 10% from end-stage renal disease.

5. The supporting documentation supplied by HCFA was largely correct: patients were correctly identified as having died or as having been past patients of our hospital.

6. Many of the patients analyzed had been admitted on multiple occasions to our hospital. This is to be expected as a result of the chronic and end-stage nature of their disease processes. However, the HCFA methodology which uses "patients" rather than "admissions" as the statistical denominator seems highly inappropriate. A patient treated aggressively (and appropriately) on four admissions who dies as a natural result of his illness on admission five is counted in the HCFA statistics as a single episode of care whch results in death. This methodology inappropriately skews the data.

In sum, we share HCFA's concern that Medicare beneficiaries must be entitled to the highest quality of health care. We look forward to working collaboratively with HCFA to improve quality assessment methodologies in the future. We reserve the right however to respectfully observe:

1. HCFA's decision to release raw statistical data is premature and inappropriate.

2. A decision by HCFA to increase funding levels to support internal quality assurance programs and to moderate the progressive cutbacks in health care funding which have occurred over the past five years will undoubtedly do much to improve the quality of the health care services which hospitals can offer to Medicare recipients.

Sincerely,

Sister Patricia Lynch.
Sister Patricia Lynch
President

Martin Paris
Martin Paris, M.D.
Vice-President,
Medical Affairs & Clinical Services

MP/jgf

Hunterdon
Medical Center

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Medicare Provider Number: 310005

Dear Dr. Roper:

Hunterdon Medical Center wishes to comment on the selected mortality information which the Health Care Financing Authority plans to publish in December, 1987. The first part of our comments relate to the overall process and the later comments relate to our specific data.

You state in your letter that HCFA intends to "...make clear that the information on its own is not a complete measure of quality ..." and "...until we have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of the information by itself to make judgements ..." Given HCFA's own reservation about the data's usefulness as an indicator of quality, publishing such information invites comparison and will logically lead to the conclusion that one hospital is better than another. We do not object to the use of mortality data as a screen to determine possible areas for further review (which is a standard practice at Hunterdon Medical Center), but we do object to the publication of such a crude indicator in a manner that does not provide an appropriate mechanism for response due to the complex issues you note in your letter.

Flemington, New Jersey 08822-9237 Telephone 201-788-6100

Athough Hunterdon Medical Center fell within the predicted ranges in all diagnostic categories a detailed analysis of our specific data revealed the following:

1. We agree with all but three (3) of the mortalities listed in the HCFA report. Three (3) patients were included in the mortality figures who died within thirty days of their last admission in 1986, however, they also had an intervening admission in January, 1987. Therefore, those patients should be included in the 1987 data base not 1986.

2. The total number of admitted patients used by HCFA cannot be completely verified since the Medical Center does not have access to the actual data used by HCFA in their analysis. Hunterdon Medical Center's data indicates a greater number of admissions than shown by HCFA.

3. An attempt to verify the Principal Diagnosis showed that HCFA's data failed to correlate with our Principal Diagnosis assignment in thirty-three (33) instances.

4. The largest single category, Pulmonary Disease (PN), showed a patient case mix with an average age of eighty-two years; the highest incidence of co-morbid conditions of 2.5 per patients (fourteen of the patients had cancer); and represented a total of one-hundred-eighteen (118) admissions or an average of three (3) per patient during the year preceding death. One patient was admitted eleven times during the year preceding expiration. Ninety-two percent of the patients in this category were admitted as Emergency or Urgent with fifty percent admitted through the Emergency Department.

5. In general, review of all mortalities reveals a population with an average age of eighty, multiple hospital admissions in 1986, and an average of two co-morbid conditions per patient.

We believe that the publication of mortality statistics does a disservice to all parties involved. While mortality data is routinely used by health professionals, it is used in a forum where such factors as the patient's general health, the stage of the patient's illness, and co-morbid conditions are analyzed in reaching a final conclusion regarding the quality of care provided. This cannot be done in a general release of data to the public.

Sincerely,

Donald W. Davis

Donald W. Davis, President
and Chief Executive Officer

Irvington General Hospital

October 26, 1987

Mr. Harvey Brook
Health Standards & Quality Bureau
6325 Security Boulevard
Room 2D2
Meadows East Building
Baltimore, Maryland 21207

Dear Mr. Brook,

We have reviewed our Hospital Specific Mortality Rates and the accompanying mortality prediction intervals for 16 diagnostic categories of medicare beneficiaries who expired within 30 days of their last admission to Irvington General Hospital in the calendar year 1986.

In 14 of 16 diagnostic categories, the actual mortality rate for Irvington General Hospital was well within the range of "predicted mortality rates".

In two (2) diagnostic categories, urologic disease and opthalmologic disease, both considered low risk, we had no mortalities. The mean age of our patient population was 80 years. Of the 119 patients listed, we find 20 cases or 17% for whom we have no record of death occurring at our facility. Our records also indicate that 150 medicare beneficiaries expired here in 1986. Consequently, 50 patients, 33% of the known inhouse population, were not included in the logistic regression. These numbers reflect the methodology employed to reflect case mix for each hospital which resulted in a capture of 70% of patients.

Although nationwide there is a plethora of data (16.5 million individuals admitted to acute care hospitals in 1986) in the case of Irvington General Hospital only 50% of the diagnostic categories had sample sizes greater than 30.

Albeit we applaud the efforts of HCFA in acknowledging that the consumer should be able to make informed decisions concerning the purchase of quality health care, we do not believe that estimates of the expected risk of death should be used as a factor in this decision making. At best the model provides accurate and reliable estimates of only five patient characteristics and the risk of death.

832 CHANCELLOR AVENUE, IRVINGTON, NEW JERSEY 07111 • TELEPHONE: (201) 399-6000

However, it does not include correlation for the following significant variables which certainly affect the probability of death:

1. Severity of illness, i.e., the stage of the patients illness on admission to the hospital.

2. The proportion of patients treated who are members of lower socioeconomic groups who present more acutely ill at time of admission.

3. Our specialty oncology unit which tends to give us a higher proportion of cancer patients in our case mix.

4. Differences in disease patterns appearing in those who live in highly industrialized geographic regions.

The HCFA mortality data should not be construed as an indicator of quality care rendered. The significance of the mortality rates lies in the fact that they may be used as a screen for further review. It is incumbent upon all acute care facilities to have in place a comprehensive system of Quality Assurance.

At Irvington General Hospital our Medical and Nursing Staffs in conjunction with our Quality Assurance professionals perform the following:

1. Review of all patient mortalities with respect to a set of generic screens. If a generic screen is failed, further review of the entire medical record is done for appropriateness of care and analysis of outcome.

2. Continuous ongoing monitoring of all aspects of patient care with emphasis upon review of the following:

    - Surgical mortalities
    - Returns to OR during the same patient admission
    - Unexpected transfers to Intensive Care Unit
    - Unexpected admission of patients from Short Stay Unit
    - Nosocomial Infections
    - Nursing Care Plans

This is just a sample of the comprehensive program of quality assurance we have in place which results in documentation and description of problem areas and resolutions of these problems to ensure that the care rendered is of the best quality possible.

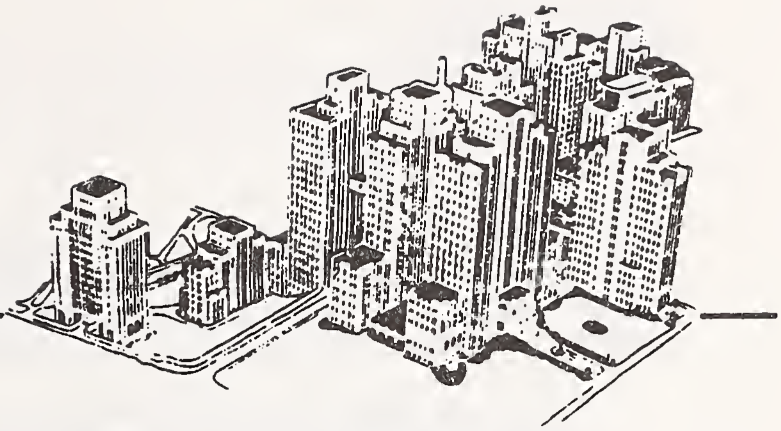
This internal mechanism has the capability to incorporate the mortality rates into its system of review.

They should not stand alone.

Very Truly yours,

Carol A. Purcell
Assistant Vice President

Jersey City
MEDICAL CENTER
BALDWIN AVENUE
JERSEY CITY, NEW JERSEY 07304
(201) 915-2000



Executive Office

October 25, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Re: Hospital Number 310074

Dear Doctor Roper:

Thank you for this opportunity to respond in advance to the release of the Medicare mortality data.

We are pleased to note that we fall within the predicted ranges of mortality. In fact, PRO data, which uses a larger data base, shows us to be even lower in mortality rates. We feel that this is very significant, particularly in light of the fact that the Jersey City Medical Center treats a very high number of low income elderly patients. Because of higher out-of-pocket costs associated with Medicare, these individuals are more likely to delay seeking medical care until their illness reaches a serious stage and, therefore, they have a higher mortality rate.

In reviewing your figures, we have noticed several areas of inaccuracy.

Severity of Illness

We are extremely concerned by the fact that the computation of the mortality rates does not take into consideration either the severity of illness of our patients or socio-economic factors. Indeed, your own notice in the Federal Register pointed out that "not all factors affecting the probability of death in a particular case, most notably severity of illness, are included in the predictive model."

The Jersey City Medical Center serves a population that is much sicker than the base used by HCFA in establishing predicted mortality ranges. Your data supports this statement. Please note:

-Of the total deaths reported by HCFA, 57% of these patients were 75 years of age and older. This age group would be expected to have higher rates of mortality.

-67% of the reported deaths were in the high risk categories.

-30% of the deaths reported by HCFA were transfers from other facilities, primarily nursing homes. These transfers inflate our mortality rates.

-32% of the reported deaths occurred within 72 hours of admission. This too is an indication of the severity of illness of patients transferred to our institution. We receive seriously ill patients from other facilities. In fact, with reference to survival rates of patients included in the data, patients admitted through our Emergency Room or directly from home (where we are directly involved in medical treatment) have higher survival rates than those transferred from other facilities.

-The Jersey City Medical Center operates the Emergency Medical Service for the City of Jersey City. Because of this, we receive all of the City's sickest patients including the sickest Medicare patients.

In summary, the Jersey City Medical Center treats older and sicker patients.

Data Discrepancies

The Jersey City Medical Center conducts its own self-assessment program. In reviewing your data, we have compared it with our own records, and have identified several important areas where our more accurate data can be used to refine your mortality figures.

-The data identified twenty-three post-discharge deaths. In fact, only thirteen were post-discharge deaths.

-In one of the post-discharge deaths, the length of stay actually exceeded 30 days and thus, should not have been included in the data.

- -One case was identified as a duplicate claim and should be removed.

- -In a review of all patient records, two cases were identified as HCFA coding errors. Correct coding would have placed these cases in different categories.

Value of Data

Mortality rates by themselves are not an overall indicator of quality. We believe that this data does not provide valid, useful information for judging hospital performance. This is particularly true in light of the fact that there is no severity of illness component in the predictive model.

Again, thank you for the opportunity to present this response. If you or anyone receiving these comments has additional questions, please do not hesitate to call me at (201) 915-2011.

Sincerely,

Harvey A. Holzberg

Harvey A. Holzberg
Executive Director

HAH/mm
cc: William J. White, Associate Executive Director
Martin W. Baicker, Assistant Executive Director
Gerald Tofani, Associate Executive Director, Finance
Sheila Paris Klein, Director, Public Relations

Jersey Shore Medical Center
1945 Route 33, Neptune, New Jersey 07754 (201) 775-5500

October 26, 1987

William L. Roper, M.D. Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington , D.C. 20201

Dear Dr. Roper:

Jersey Shore Medical Center is a voluntary, nonprofit Regional Medical Center serving Monmouth and Ocean counties in New Jersey

With a capacity of 482 beds and 47 bassinets, the Medical Center provides a full range of services for the diagnosis, rehabilitation, treatment, and prevention of health problems.

Jersey Shore Medical Center's regionalized services include a Level III Perinatal Center, a Neonatal Intensive Care Nursery, Cardiac Diagnostic Center, Renal Dialysis Center, Community Mental Health Center, and the Center for Cancer Therapy which houses an 18 MEV linear accelerator for the treatment of cancer.

The hospital maintains its own licensed heliport, adjacent to the Center, for the transport of patients requiring immediate emergency care. Our Emergency Department is one of the busiest in the state.

As a teaching hospital affiliated with the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, Jersey Shore Medical Center has thirty-seven medical specialties represented by its 300 plus physicians and dentists. Because we are a teaching hospital, we attract sicker patients than do other hospitals. In fact, a significant proportion of patients require more intensive care. A large proportion of our patients are also elderly. These patients tend to be significantly sicker because of this. Another factor is our location. Because we are a teaching hospital, and because of our location, we tend to attract a significant number of patients who have no insurance. These patients also tend to be sicker than do individuals who have insurance, because they wait much longer before they receive care. These factors contribute to Jersey Shore Medical Center's patient mix. We understand that HCFA has attempted to adjust for these factors in reporting our mortality rates. However, given the diversity of our patient population, any attempt to completely adjust for these factors is extremely difficult. The fact that we have older, sicker patients, that we are a teaching hospital, and that we provide a significant proportion of our services to individuals who are uninsured, all contribute to the mortality rate in our hospital.

VHA · Member of Voluntary Hospitals of America Inc.·

We are confident that we have the appropriate mechanisms in place to review the quality of care received at our institution. We also support the government's effort to use a computer program to look at hospitals which may have mortality rates above the norm. While our mortality rates are within this norm, we will use HCFA's Computer data as well as our own data to review the quality of our health care.

As with any computer model, we fully realize that there are limitations. One serious limitation which should be brought to attention is that the HFCA computer tapes used in the model have a significant proportion of missing data. We wish to work with HCFA in the future to provide the best computer records possible on our patients so this situation can be improved. In this regard, we would be appreciative if HCFA would provide us with a better printout of individual cases in the future. The current printout provided is extremely difficult to cross reference with our records.

We are pleased to learn that our mortality rate is within the normal range for our type of hospital. We realize that mortality rates are only one indicator of the quality of care provided by a medical facility. However, as HCFA has pointed out, this should not be the only factor used to judge the quality of care provided. Other factors need to be monitored as well, and we feel we are currently doing this.

Jersey Shore Medical Center has a long history of concern about quality assurance. A Board endorsed Quality Assurance Program is in place and functions on both a departmental and institutional level. The hospital has recently received continuing accreditation from the Joint Commission for Hospital Accreditation and each medical department conducts a morbidity and mortality conference on a regular basis. The medical Staff Executive Committee and the Board receive reports from the Quality Assurance Committee regularly. The physicians, nurses, and administrative personnel who work with these committees have placed a renewed emphasis on studies that will regularly monitor the care being provided.

Sincerely,

Carl M. Marchetti MD

Carl M. Marchetti, M.D.
Vice President for Medical Affairs

Care Provider #31-0073

CMM/sb

KENNEDY

Kennedy Memorial Hospitals
University Medical Center

Corporate Offices
113 E. Laurel Road
Stratford, NJ 08084
609-346-7900

October 26, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Enclosed with this letter is Kennedy's response to the HCFA mortality data release.

This response is not intended to discredit the intent of the data released or the methodology used in determination of the mortality rates or the predicted ranges. However, the number of HCFA deaths approximates the number accounted for in hospital records; but the number of admissions is understated by over 66% or 2,300. This number of admissions from the Hospital records is validated by the Peer Review Organization statistics for the same time period. This significant statistical disparity should be taken into consideration by the HCFA when releasing its data pertaining to Kennedy Memorial Hospitals-University Medical Center.

Thank you for allowing us the opportunity to review and comment on the data prior to its release.

Very truly yours,

Richard E. Murray

Richard E. Murray
Executive Vice President

REM:lr
Enclosure

The Major Teaching Affiliate of the University of Medicine and Dentistry of New Jersey
New Jersey School of Osteopathic Medicine

October 26, 1987

MORTALITY DATA RELEASE

Introduction

Kennedy Memorial Hospitals-University Medical Center acknowledges the opportunity to review and comment on the Health Care Financing Administration (HCFA) mortality data. Kennedy continuously conducts mortality review as required by state licensure and accreditation as part of the Hospital's Quality Assurance Program. This program is audited regularly by the State of New Jersey Department of Health and the accreditation organization. Kennedy has maintained total compliance with these requirements and regulations as validated by these two outside agencies. It should be understood that this quality review activity would be carried out by Kennedy Hospital and medical staff even if it were not required by the government and other external reviewers.

General Comments

It is not the intent of this response to discredit the Health Care Financing Administration methodology or its purpose in releasing this information to the public. However, it is felt that this data does not represent a valid indicator for the quality of care provided in our Hospital since the data is incomplete and does not utilize a severity of illness adjustment. The medical records of all of the patients who died were reviewed to determine if the deaths were the expected outcome at the time the patient was admitted; i.e., the patient was admitted to the Hospital in order to die, or death was the result of following the patient's wishes with respect to extraordinary efforts; such as, "do not resuscitate." Mortality review is conducted in all cases where death was not expected at the time the patient was admitted, and in cases where death was considered a significant possibility; such as the patient was under treatment for a chronic condition or has sustained massive trauma. New Jersey hospitals treat the second oldest median age population in the nation. The state's Medicare patients' average length of stay is 10.9 days compared to a national average of 8.8 days. Simply put, New Jersey hospitals treat more Medicare patients who stay longer resulting in expected higher mortality rates within the diagnostic categories. HCFA lumps New Jersey hospitals in with the rest of the nation's hospitals.

Specific Comments

The HCFA mortality data indicates that a total of 527 Medicare patients were admitted to Kennedy and died within thirty days of admission in 1986, out of a total of 3,520 Medicare patients admitted. Of the 527, 443 died while a patient in the Hospital and 84 died following discharge. However, the Peer Review Organization of New Jersey (PRO) (the New Jersey Department of Health approved and designated utilization review organization) presents data for the same time period indicating that 5,845 Medicare patients were admitted to Kennedy. This is 66% more admissions than included in the HCFA data. These additional admissions, when used to determine overall mortality rates and the rates in the diagnostic categories, significantly lowers the actual mortality rate for the Hospital. The number of deaths attributable to Kennedy by both agencies (PRO and HCFA) is close to the actual number accounted for by the Hospital. Therefore, the rates are lower when the numerator is constant (the number of deaths) and the denominator (number of admissions) increases. A comprehensive review of PRO and Hospital data, correcting the HCFA data demonstrates the Hospital's overall mortality rate is 10% or less, and at approximately mid-point or lower in all the PRO predicted mortality rates for the diagnostic categories.

Mortality rates alone should not be used to define quality. As previously indicated, HCFA does not provide the severity of illness adjustment that has a very significant influence on the data; i.e., without a severity of illness adjustment, mortality rates simply cannot be accurately used to assess hospital care. The HCFA data indicates that Kennedy approaches in three diagnostic categories, and exceeds, in two others, the upper limit of the "predicted mortality rate." As an exercise, the Hospital's Quality Assurance staff reviewed these five diagnostic categories and found the following:

Δ In 51% of the cases, the patient and/or the family and the attending physician agreed to a "do not resuscitate" situation which reaffirms the need for a severity of illness adjustment.

Δ In 28% of the cases, the patients were admitted to the Hospital in crisis situation from an extended care facility.

Δ In 71% of the instances, the patients had other contributing diagnoses or complications (co-morbidities) not recognized by HCFA.

Δ In 23% of the admissions, the patients were hospitalized for less than one day when they died, indicating further severity of illness.

Kennedy Action

In recognition of the needs of our aging population, Kennedy has developed referral networks and the following unique services in response to those needs:

Δ Hospital is a multi-disciplinary teaching hospital servicing patients with increased severity of illness.

Δ The University and the Hospital has a gerontology training program that educates young physicians in treating the special needs of the elderly.

- Allocation of hospice beds to meet the needs of the terminally ill.
- A highly specialized respiratory intensive care unit.
- Own and operate our own nursing home and service the medical needs of approximately thirty surrounding extended care facilities.
- Cardiac Cath Lab to meet the increased acuity status of our cardiac patients.
- Inpatient as well as outpatient oncology services.

As the result of the unique services, Medicare beneficiaries with a higher degree of severity of illness are attracted to Kennedy Memorial Hospital-University Medical Center.

Conclusion

The HCFA information does not substantiate HCFA's goal for use by the public as a "consumers' guide." As a public service, HCFA must caution readers that this information does not provide an index to hospital performance since it does not provide complete information, does not utilize severity of illness adjustment, and does not include other relevant information impacting upon the mortality rates of our hospital and other hospitals.

lr

Meadowlands Hospital
Medical Center
Meadowland Parkway,
Secaucus, New Jersey 07094
(201) 392-3100

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for this opportunity to respond to HCFA's latest mortality rate release.

Since receiving the report on September 21st, we have reviewed the data and taken steps to verify the information you provided us with. Our own records from 1986 differ significantly in terms of total number of cases, as well as number of deaths in each category. Using our data, our actual mortality rate for severe acute heart disease is much lower than the 55% you show on your report. In addition, we have also received data from the PRO of New Jersey for the same time frame. The PRO data shows a 16% mortality rate for severe heart disease.

Although the diagnoses used by the PRO differ somewhat from those used by HCFA, we feel that this example illustrates the gross variations that exist from sample to sample, thereby not giving a true picture of mortality rates.

There are many variables to be considered in mortality rates. A primary factor, which was not included in this data, is a severity indexing factor i.e. the patient's condition on admission.

We feel that data such as this is important and agree that the consumer has the right to information regarding quality of care. We do not, however, feel that this type of data, without a severity factor, provides valid or useful information for judging a hospital's performance.

Meadowlands Hospital Medical Center reviews all mortalities, as well as internal mortality rates, on a monthly basis at our Patient Care Evaluation Committee. Providing us with state and national averages is very helpful in that we can compare ourselves to other institutions. Meadowlands Hospital Medical Center has a comprehensive Quality Assurance Program which includes mechanisms for the ongoing review and evaluation of the quality and appropriateness of patient care rendered at our institution.

Again, thank you for the opportunity to present this response. If you or anyone receiving this material have additional questions, please do not hesitate to call me.

Sincerely,

Helen M. Kennedy

Helen M. Kennedy
Executive Vice President/
Administrator

HMK/npb

cc: Paul V. Cavalli, M.D.
President and C.E.O.

Donna Cardillo, R.N.
Director of DRG Services/
Quality Review Services

THE MEDICAL CENTER
AT PRINCETON

PRINCETON, NEW JERSEY 08542 • TELEPHONE CODE 609 921 7700

November 2, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

The letter concerning the Health Care Financing Administration mortality data dated October 29, 1987 contained the wrong Medicare Provider number. The correct Medicare Provider number is 31-0010.

I apologize for any inconvenience this may have caused.

Yours truly,

Dennis W. Doody /do

Dennis W. Doody
President

do

THE MEDICAL CENTER AT PRINCETON

Princeton, New Jersey 08540-3213 • 609-921-7700

DENNIS W. DOODY, PRESIDENT

November 2, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

In addition to receiving mortality data on our acute short term hospital, the Medical Center at Princeton also received mortality data on the Merwick Unit of the Medical Center.

The Merwick Unit is a 93 bed unit of the Medical Center which consists of 76 long term care beds and 17 physical rehabilitation beds, the latter of which are reviewed by the PRO. According to our understanding, and as reviewed with the Peer Review Organization of New Jersey, Inc., Merwick should not be included in the publicized mortality data.

We would appreciate correcting the situation so that Merwick mortality data does not get published. The provider number for the physical rehabilitation unit (17) beds is 31-0906.

Thank you very much.

Very truly yours,

Dennis W Doody

Dennis W. Doody
President

DWD/do

THE MEDICAL CENTER AT PRINCETON

Princeton, New Jersey 08540-3213 • 609-921-7700

DENNIS W. DOODY, PRESIDENT

October 29, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Doctor Roper:

The Medical Center at Princeton would like to offer the following comments on the Health Care Financing Administration mortality data:

1. The Medical Center has an ongoing quality assurance program that reviews and assures for high quality care to all of our patients.

2. All deaths at the Medical Center are automatically peer reviewed as part of our quality assurance program.

3. We do not believe that mortality data only is an appropriate measure of the quality of care provided by an individual hospital or to make comparisons among hospitals.

4. The Medical Center at Princeton continues to achieve maximum three year accreditation by the Joint Commission on Accreditation of Healthcare Organizations.

Please note that our Medicare Provider number is 31-5001.

We thank you for the opportunity to comment on the published mortality information.

Very truly yours,

Dennis W Doody

Dennis W. Doody
President

DWD/do

UNION HOSPITAL

1000 Galloping Hill Road • Union • New Jersey • 07083 • (201) 687-1900

October 26, 1987

Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

To Whom It May Concern: PROVIDER # 310090

Please accept the following statement as Union Hospital's official comments regarding the recently mortality data as released by HCFA.

If you have any questions, please do not hesitate to contact me.

Thank you for allowing us the opportunity to share our comments with you.

Sincerely,

James J Masterson

James J. Masterson
Director, Public Relations

JM/es
Attachment

A NON-PROFIT TEACHING HOSPITAL

STATEMENT TO HCFA

Union Hospital has reviewed the mortality data provided by HCFA. We are pleased that with only one exception, we are well within expected mortality ranges. That exception is, of course, cancer. We are satisfied that because of the Hospitals' commitment to the care and treatment of patients with this disease, that through our intensive Oncology and Hospice Programs, we are providing a much needed community service.

Through ongoing quality assurance programs, Union Hospital will continue to closely monitor the quality of patient care it delivers.

MH

Memorial Hospital of Burlington County
175 Madison Avenue
Mount Holly, New Jersey 08060
Telephone: 609-267-0700

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Memorial Hospital - Number 310057
HCFA Mortality Information

Gentlemen:

The accompanying data on hospital mortality released by the Health Care Financing Administration offers the institution and the consuming public an opportunity to review a single measure of a hospital's performance.

Mortality rates are but one indicator used to monitor patient care activity. Many other indicators can and should be examined. Memorial Hospital of Burlington County has an extensive and sophisticated program of Quality Assurance that evaluates not only mortality data, but other non-mortality outcomes. Data released by HCFA this year reflects a case mix analysis but offers no adjustments for severity of illness. As inpatient length of stay drops, the outpatient treatment becomes more common, the intensity of service provided to Medicare recipients, as well as the relative severity of their illnesses, has dramatically changed. A sound Quality Assurance effort evaluates far more than mortality information.

Memorial Hospital of Burlington County is a 402-bed, non-profit hospital that provides a broad range of services to its patients. Our proud tradition of commitment to the community will continue to provide a broad range of services, all of which will be monitored under our quality assurance program.

Sincerely,

Geoffrey Stone

Geoffrey L. Stone
Administrator

M. Dean Kinsey, MD
Director, Medical Affairs

GLS:ks

A Member of VHA

MERCER MEDICAL CENTER

October 27, 1987

William L. Roper, M.D.
Administration
Health Care Financial Administration
Department of Health and Human Services
Washington, D.C. 20201

Response to HCFA

Dear Doctor Roper:

Mercer Medical Center welcomes the opportunity to comment on the Medicare 30-Day Mortality figures. We can do this objectively since none of our mortality figures is above its predicted range. Statistics are useful if they lead to a better understanding of reality. In this case they do not. In analyzing a statistical study, one looks at the methods employed, the data on which the study is based, and the interpretation of the results. We, therefore, have three points to make:

1. The method chosen by HCFA in counting Medicare admissions has the effect of making reported mortality rates appear about twice the actual rates. Though the proper, correct, or acceptable mortality rate for a heterogeneous group of elderly patients has never been established, anything that makes the reportable percentage higher will superficially make it look worse, and is misleading.

2. The point of the study is to develop a measure of quality of care. But quality of care, itself, is not measured. The only patient specific data used by HCFA are a handful of numerical codes on a standard hospital electronic billing claim. HCFA's entire study is based on manipulating these data from millions of such claims to arrive at "predicted" mortality rate ranges. If the actual mortality rate for a group of people falls outside the predicted range, the most one can say is that factors associated with mortality (whether inherent in the group of patients, in the care rendered to them, or extraneous to both) were not taken into account. The great majority of people who die in a hospital, die because they are very sick and the medical community does not know how to cure them. Nobody including HCFA disputes this. HCFA admits, and everyone working in health care knows, that there is no good index of the severity of illness (a convenient numerical measure

446 Bellevue Avenue P.O. Box 1658 Trenton, New Jersey 08607 609-394-4000

of how sick someone is), and certainly no such index is contained in billing information. Without taking account of severity of illness, the "predicted" rates cannot predict much. It is wrong, therefore, to conclude or to represent that predicted mortality rate ranges have been established by this study. Of greater concern is to give an impression that deviations from them are due to poor quality of care.

3. As of this writing, our understanding of HCFA's interpretation of the data is contained in a letter to us dated September 21, 1987. It implies that the information to be released December 1987 says something about quality of care. We strongly disagree with this. It includes suggestions that the information will be helpful in certain ways to certain groups. We are doubtful. We can, though, emphatically endorse this: "We want eventually to reach the point where the issuance of information will allow the user to make judgments on the quality of care provided by individual institutions."

Mercer Medical Center, like all hospitals, will continue to strive for quality the old fashioned way, laboriously studying the detailed, narrative patient record. We identify undesirable outcomes including death and try to change things for the better.

Sincerely,

Charles E. Baer

Charles E. Baer
President

CEB/dg

ROBERT·WOOD·JOHNSON
UNIVERSITY HOSPITAL

Provider No. 31008

October 27, 1987

The Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Thank you for the opportunity to comment on the Medicare mortality statistics being published by the Health Care Financing Administration.

Robert Wood Johnson University Hospital is an academic health care center that provides highly sophisticated specialized care in such areas as cardiac and trauma surgery. As a result, we get many of the most severely-ill and critically-injured patients in Central New Jersey, including a large number of transfers from other hospitals.

Our Quality Assurance Department has carefully analyzed the statistics provided by HCFA as part of its ongoing monitoring of all information bearing on patient care at the Hospital.

We agree with HCFA that the release of the mortality statistics "is not a complete measure of the quality of care at an individual hospital" (letter from William L. Roper, M.D., HCFA Administrator, 9/21/87) but view the released statistics as important information that requires careful analysis.

According to the released report, Robert Wood Johnson University Hospital falls within the predicted mortality range for all the diagnostic categories listed with one exception. That exception is sepsis (the presence in the blood or other tissues of pathogenic microorganisms or other toxins). For sepsis the range of predicted mortality rates is listed in your report as 16 to 62 percent and our Hospital's actutal mortality rate is listed as 63 percent, just slightly over the statistical parameter.

The statistical sample on sepsis at Robert Wood Johnson University Hospital was very small--a total of 16 patients, of which 10 were identified as having died of sepsis.

-more-

One Robert Wood Johnson Place
New Brunswick, New Jersey 08901/201-828-3000

Our careful analysis of these ten cases reveals the following:

> One of the 10 patients reported as having died of sepsis expired in our Emergency Department of congestive heart failure. Sepsis was suspected and diagnostic tests were ordered to determine if sepsis was present. However, the patient died before these tests could be done. A chest x-ray did indicate vascular congestion. Our utilization review physician has reviewed the patient's chart and concluded that the patient died from congestive heart failure, not sepsis.
>
> If this one case is removed from HCFA statistics, Robert Wood Johnson University Hospital falls within the range of predicted mortality rates identified by HCFA for sepsis (16-62). The ratio now becomes 9 deaths from 15 cases or 60 percent. (A detailed analysis is available, if requested, from the Hospital's Quality Assurance Department.)

In judging quality of care, severity of illness is a crucial factor. Of the nine patients reported as having died of sepsis, two had cancer, two had end stage renal disease, one had chronic and multiple organ deterioration, and one had suffered cardiac arrest in a nursing home.

Quality care has always been a primary goal of Robert Wood Johnson University Hospital. Quality Assurance Committees, made up of physicians, nurses, administrators, and ancillary personnel, are organized and meet regularly in the Departments of Medicine, Surgery, Obstetrics-Gynecology, Pediatrics, and Family Practice. These committees assess patient care. There are other special committees, such as the Transfusion Committee to evaluate blood usage and the Surgical Care Review Committee which evaluates indications for surgery. A full-time Quality Assurance Department assists the medical and ancillary staff in assessing and improving quality of care.

millville hospital
frank h. wheaton regional cancer treatment center

High Street and Harrison Avenue
Millville, New Jersey 08332
(609) 825-3500

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

After reviewing the HCFA Mortality Statistics for Millville Hospital for calendar year 1986, we noted that our actual mortality rate falls within the range of predicted morality rates for each diagnostic category.

We are particularly pleased in light of the fact that Millville Hospital operates a Regional Cancer Treatment Center offering all major modalities of cancer therapy. We tend to draw patients from a wider base than a typical acute care facility. These patients, many of who tend to be in older age groups, are receiving palliative therapy for disease which ultimately proves fatal. We anticipated our actual mortality rate of medicare patients to be greater than that predicted in a typical community acute care facility. The fact that we did not exceed a range of predicted or expected mortality rates is a tribute to the high level of the quality of care rendered at this institution. We have and will continue to monitor all mortalities at this institution and maintain an active and on-going Quality Assessment Program.

Sincerely,

Eber Henderson

Eber J. Henderson, M.D.
President - Medical Staff

Larry Mapow, M.D.
Chairman - Utilization Review Committee

lra

A Non-Profit Community and Regional Health Care Facility Serving Southern New Jersey

MONTCLAIR COMMUNITY HOSPITAL
120 HARRISON AVENUE
MONTCLAIR, N.J. 07042-2498
201—744-7300

October 8, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Relative to your correspondence of September 21st the following are comments regarding our review:

1. Actual number of Medicare patients who died are correct. Names and dates are correct for in-house deaths.

2. There are two cases listed under Low Risk Heart Disease which should be in more severe High Risk Categories. These are underscored in green.

A. [redacted] [redacted] 11/21/86 - 11/25/86
FINAL DX: Renal insufficiency (4049) with congestive heart failure (4280)

The 4280 should put the case into severe chronic heart disease, a high risk category.

B. [redacted] [redacted] 2/28/86 - 3/9/86
FINAL DX: Complete heart block

Warrants being included in HS (severe acute heart disease) category. High Risk instead of Low Risk heart disease. Statistics have been adjusted to reflect our comments.

Sincerely,

Emilie M. Murphy
Administrator

EMM/lm
Enclosure

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

HOSPITAL = 310043 MONTCLAIR COMMUNITY HOSP MONTCLAIR NJ

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES	
ALL CAUSES	953	12 %	10 TO 17 %	
CA - CANCER	74	16 %	15 TO 37 %	
CE - CEREBROVASCULAR ACCIDENTS	55	27 %	18 TO 43 %	
EY - OPHTHALMOLOGIC DISEASE	22	5 %	0 TO 81 %	1 patient
GC - GASTROINTESTINAL CATASTROPHES	25	12 %	6 TO 38 %	
GI - GASTROINTESTINAL DISEASE	99	7 %	3 TO 13 %	
GU - UROLOGIC DISEASE	31	0 %	0 TO 23 %	
GY - GYNECOLOGIC DISEASE	5	0 %	0 TO 99 %	
HL - LOW-RISK HEART DISEASE	~~66~~ 64	~~3 %~~ 0%	1 TO 13 %	3% represents 2 cases
HM - SEVERE CHRONIC HEART DISEASE	~~70~~ 71	~~21 %~~ 23%	14 TO 35 %	
HS - SEVERE ACUTE HEART DISEASE	~~35~~ 36	~~40 %~~ 50%	28 TO 61 %	
ME - METABOLIC/ELECTROLYTE DISTURBANCES	43	26 %	10 TO 37 %	
OP - ORTHOPEDIC DISORDERS	60	0 %	0 TO 12 %	
PN - PULMONARY DISEASE	78	21 %	13 TO 32 %	
RN - RENAL DISEASE	5	20 %	4 TO 73 %	
SE - SEPSIS	6	33 %	6 TO 71 %	
TR - SEVERE TRAUMA	35	6 %	2 TO 23 %	

ADJUSTED - SEE COMMENTS

ATTACHMENT 4

COMMENTS ON THE HCFA MORTALITY DATA
Memorial Hospital, Middletown, Anystate

Data Verification

The data used by HCFA indicate that a total of 115 Medicare patients admitted to MCH hospital died within 30 days of admission. Of these, 97 died while still a patient of the hospital, while 18 died after discharge. Our own records indicate that 1,529 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at MCH hospital is correct. Our own records also indicate that of the 115 Medicare patients who died within 30 days of admission while still an inpatient, 18 were still alive at the time of discharge. [NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.] It is impossible to determine the percentage of the 18 patients dying after discarge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In _____ of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to _____. Several factors may account for this difference.

Unique Services Resulting in Higher than Average Mortality.

Results of Prelimary Medicare Record Review.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	12	0	12	0
CE -- Cerebrovascular Accidents	15	0	15	0
GC -- Gastrointestinal Catastrophes	2	1	2	1
GI -- Gastrointestinal Disease	4	3	4	3
GU -- Urologic Disease	0	0	-	-
GY -- Gynecologic Disease	0	0	-	-
HL -- Low Risk Heart Disease	2	0	2	-
HM -- Severe Chronic Heart Disease	13	2	13	2
HS -- Severe Acute Heart Disease	13	4	13	4
ME -- Metabolic/Electrolyte Disturbances	9	2	9	2
OP -- Orthopedic Disorders	0	0	-	-
PN -- Pulmonary Disease	13	3	13	3
RN -- Renal Disease	1	0	1	-
SE -- Sepsis	2	0	2	-
TR -- Severe Trauma	1	1	1	1
OP -- Ophthalmalogic Disease	1	0	1	-
UN -- Other Diagnoses	9	2	9	2
Total -- All Categories	97	18	97	18

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

MORRISTOWN MEMORIAL HOSPITAL
100 MADISON AVENUE / MORRISTOWN, NEW JERSEY 07960
A Major Teaching Affiliate of The Columbia University College of Physicians and Surgeons

Telephone: 201/540-5175

November 9, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Medicare # 31-005

Gentlemen:

We have received and reviewed the Hospital Mortality Data released by your agency in September. While we have no comments on our specific data at this time, we wish to express our concern relative to the methodology used and the impact we feel it may have on our hospital in future years. Most specifically, we have grave concerns about the utilization of mortality data by diagnostic category which does not take into account differences in the severity of illness within each diagnostic category.

As a large teaching hospital and the only regionalized medical center in northwest New Jersey, the patients admitted to Morristown Memorial Hospital are without question sicker and having more co-morbid conditions than those admitted to surrounding hospitals in our area. This has been demonstrated by the New Jersey State Department of Health in the use of its case mix index, an index which adjusts for the severity of patients by individual hospital. While Morristown Memorial Hospital fell within the range of predicted mortality rates on all diagnostic categories during this review process, we anticipate this may change in future years as our patients continue to become more acutely ill. In this context, we must caution the Health Care Financing Administration in both the description of the data and its use. It is important that the public be made aware that this data cannot be used to measure hospital performance and what its limitations are.

A SUBSIDIARY OF MORRISTOWN MEMORIAL HEALTH FOUNDATION, INC.

We encourage the Administration to preface any release or use of this information with the limitations and would hope that an effort would be made in future years to more accurately adjust the data to the acuity of patients within individual hospitals.

We thank you for the opportunity to make these comments and hope you will find them of assistance.

Sincerely,

Carol Paul

Carol Paul
Vice President
Legal/External Affairs

CP:mo

cc: Robert Ambrose, M.D.

THE
MOUNTAINSIDE
HOSPITAL

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

REFERENCE: Medicare Provider #31-0054

Dear Dr. Roper:

The following constitutes Mountainside Hospital's comments pertaining to the release of mortality information regarding Medicare patients treated at Mountainside Hospital in 1986.

Although the mortality rates for Medicare patients at Mountainside Hospital fall within HCFA's predicted ranges, Mountainside Hospital feels it is important to caution the public against reliance on the data as a measure of quality, and to stress that HCFA itself does not recommend using this information to make judgements about the quality of care in an individual hospital, or to make comparisons among hospitals. It is essential for consumers to recognize that one major limitation to the mortality statistics is that the methodology used by HCFA fails to account for a patient's severity of illness, or a hospital's emergency room cases, oncology services or hospice care. In addition, there is no standard method of determining the casue of death and many of these patients had multiple illnesses which renders the data suspect in certain cases.

Mountainside Hospital encourages the development of reliable quality measures. We will continue to cooperate with HCFA's release of mortality data, as well as with any other regulatory agency involved in quality assurance activities. However, most importantly, we at Mountainside will continue our own comprehensive efforts toward assessing and assuring quality medical care for our patients.

Sincerely,

Bernard G Koval

Bernard G. Koval
President and Chief Executive Officer

BGK:gm

Bay and Highland Avenues, Glen Ridge/Montclair, New Jersey 07042 Telephone (201) 429-6000

**MUHLENBERG REGIONAL
MEDICAL CENTER, INC.**

Park Avenue & Randolph Road
Plainfield, NJ 07061

David M. Ridgway
President & Chief Executive Officer
(201) 668-2250

October 26, 1987

William Roper, M.D.
HCFA Administrator
Health Care Financing Administration
Hubert Humphrey Bldg. Room 314 G
202 Independence Avenue SW
Washington, DC 20201

Dear Dr. Roper:

Thank you for the opportunity to review and respond to HCFA's mortality data recently provided to Muhlenberg Regional Medical Center, Inc.

Upon receipt of the data, a team of professionals including representatives from the medical staff, Quality Assurance Office, Medical Records Department, and Data Processing Department were assigned to review the mortality data, as well as a random sample of the medical records of these patients.

This review included:

1) Comparison of the actual numerical data with our own internal statistics;

2) Review of all deaths on a case by case basis with our mortality review data. This is the product of a comprehensive peer review process which identifies cause of death, co-morbidity, health status of the patient upon arrival to the hospital, existence of a "Do Not Resuscitate" order upon arrival to the hospital and also "Do Not Resuscitate" status within 48 hours of the admission. Also reviewed are admissions from nursing homes and admissions of terminally ill patients;

3) Review of each case with a profile indicating comorbid conditions and complications;

4) An effort to trace deaths outside the hospital through records of our Home Care and Hospice programs.

We have been unable to validate the total number of Medicare discharges for 1986 despite the fact that we have excluded Medicare patients with multiple admissions and have only counted the patient's last admission. Our total of Medicare patient discharges is 3,232 as compared with 2,802 in the HCFA data. The difference in the figures is of concern since the lower denominator used by HCFA has a negative impact on the calculation of our institutional mortality rates.

In analyzing the HCFA data against our internal data, we are satisfied with the relative accuracy as it relates to the case by case review of Medicare deaths. We were able to verify the deaths of 38 of 60 patients who expired after discharge who were beneficiaries of our Home Care or Hospice Program, as well as several more patients who were discharged to nursing homes. One patient on the list had expired in the hospital; the date of death was incorrect.

Our case by case review has generally revealed a population of patients with a highly significant coincidence of serious, comorbid conditions and complications. A large number of these patients had a "do not resuscitate" order. These are but a few examples of indicators of severity of illness, a most critical aspect of mortality review.

The process for mortality review at Muhlenberg Regional Medical Center was substantially upgraded following the initial release of mortality data by HCFA in March 1986. We are still concerned, however, over the lack of a definitive, objective tool to assess severity of illness. Indeed, this deficiency stands out as a primary weakness in the current HCFA model. As noted in the Federal Register of 8/17/87, "...not all of the factors affecting probability of death in a particular case, most notably severity of illness, are included in the predictive model because information on these is not readily available." We anxiously look forward to the development of a methodology for assessing severity of illness since this will greatly enhance the validity and significance of mortality review.

Muhlenberg Regional Medical Center prides itself on a strong, institutional commitment to quality care vigorously supported by Board, Management and Medical Staff. Extensive mechanisms are in place to monitor and assure that a high standard of quality is maintained. This is accomplished by means of a comprehensive quality assurance program which includes a system to identify quality problems and initiate corrective actions.

Mortality data provide a valuable tool to identify potential areas for focus and thus represent an integral part of this quality review process. However, we must exercise caution to assure that this data is not promoted for use as a quality indicator for the consumer. The responsibility for education of the public in this regard is an important task to which HCFA should address itself at the time of public release of this information.

Very truly yours,

David M Ridgway

David M. Ridgway
President

DMR:ab

MUHLENBERG REGIONAL
MEDICAL CENTER, INC.

Park Avenue & Randolph Road
Plainfield, NJ 07061

David M. Ridgway
President & Chief Executive Officer
(201) 668-2250

October 26, 1987

William Roper, M.D.
HCFA Administrator
Health Care Financing Administration
Hubert Humphrey Bldg. Room 314 G
202 Independence Avenue SW
Washington, DC 20201

Dear Dr. Roper:

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We have been unable to validate the total number of Medicare discharges for 1986 despite the fact that we have excluded Medicare patients with multiple admissions and have only counted the patient's last admission. Our total of Medicare patient discharges is 3,232 as compared with 2,802 in the HCFA data. The difference in the figures is of concern since the lower denominator used by HCFA has a negative impact on the calculation of our institutional mortality rates.

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Affiliated with the University of Medicine and Dentistry of New Jersey / Robert Wood Johnson Medical School

Beth
TECHNOLOGY WITH COMPASSION

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October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Re: Medicare Provider No. 310002

Dear Dr. Roper:

Newark Beth Israel Medical Center has been an active participant in the ongoing Health Care Financing Administration process of attempting to quantify and refine data concerning hospital patient mortality rates. We commend the goal of such efforts, which is to assist the public in making more informed and educated decisions in the selection of heath care providers.

However, we continue to have serious reservations about the wisdom of releasing data which, in the words of Health Care Financing Administration's own Administrator, William L. Roper, M.D., is such that "Until we have developed statistical measures to deal with complex issues such as severity of illness, we can not and do not recommend the use of the information by itself to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals."

As a major inner-city teaching medical center, serving as a wide-spectrum tertiary care and referral facility, it is not surprising that our patient population is generally far sicker than the national norm. Because we offer a full complement of cardiac services including electrophysiology, percutaneous angioplasty and particularly our Intra-Aortic Balloon Pump transport services, it is expected that these extremely high-risk patients would produce an increased rate of mortality. Additionally, as the recipient of a large number of referred end-stage oncology patients, our cancer mortality data inevitably reflect the terminal nature of the disease.

We question the Health Care Financing Administration model for predicting mortality rates, which fails to consider the severity of illness among its factors. Of the 63 cases which are listed in the Health Care Financing Administration statistics as "Low Risk Heart Disease," we have determined through re-examination of our charts that 28 of these were clearly high risk patients, with presenting symptoms of acute myocardial infarction or congestive heart failure. A recalculation of the mortality rate in this category would reduce the published rate from 8% to 4.5%, which falls within the predicted range of mortality for low risk heart disease. Our own rigorous internal Quality Assurance program, and our risk-stratification system, have substantiated these findings, which contradict the Health Care Financing Administration classification as "Low Risk."

It is significant that there are discrepancies between New Jersey's statewide mortality data, and that of the Health Care Financing Administration. The New Jersey data was gathered through Peer Review Organization (P.R.O.), which, after all, is contracted by the Health Care Financing Administration to monitor quality of care standards. In that monitoring process, Newark Beth Israel Medical Center has demonstrated significantly reduced mortality in the area of cardiac care and overall. As a result, the hospital has been exempted from target review by the PRO.

We reiterate our commitment to the goal of educating the public regarding quality of healthcare services, and we intend to remain fully involved in the pursuit of that goal. The current Health Care Financing Administration data, however, fails to address some of the major elements in developing a yardstick for measuring quality of care, and as a result, delivers at best, a minimally useful series of numbers. We hope that the public will recognize the limitations of this data.

Sincerely,

Lester M. Bornstein

Lester M. Bornstein
President

jt

NEWCOMB MEDICAL CENTER
65 SOUTH STATE STREET
VINELAND, NEW JERSEY 08360
(609) 691-9000

DAN L. REX, FACHE
President and Chief Executiv

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

Thank you for this opportunity to respond to HCFA's selected performance information on hospitals providing care to medicare beneficiaries.

Since receiving the report, a number of people at Newcomb Medical Center have had an opportunity to review this information. We think you and any member of the public who requests a copy of our statistical information will be interested in the following findings from our review:

- HCFA reported that 216 medicare patients admitted to Newcomb Medical Center died within 30 days of discharge. It was further reported that 195 deaths occurred in the hospital, and 21 were post-hospital deaths. A review of our data confirms that there were 216 deaths; however, 199 were in the hospital and only 17 were post-hospital deaths. A copy of Attachment 5 is attached for reporting errors.

- The category in which Newcomb exceeded the predicted mortality rate was Severe Acute Heart Disease. HCFA reported 42 deaths in this category, and 4 of these cases were reported as post-hospital deaths. A review of our data reveals that there were only 3 post-hospital deaths. Moreover, 10 of the 42 cases reflected coding errors—all related to change in principal diagnosis. Therefore, there are 31 deaths in this category.

Newcomb Medical Center appreciates HCFA's attempts to create a more open and orderly process for the release of this information than was used last year. Nevertheless, we express deep concern about the potential use of this information by consumers to make decisions about their health care. We don't feel that this data provides an accurate index of hospital performance. The predicative model has limitations, particularly the omission of the severity of illness. For example, 24 of the 42 cases in the Severe Acute Heart Disease category at Newcomb had "do not rescusitate" orders on the chart. This indicates that the physician, in accord with the family or patient, expected the death. Therefore, the omission of this factor raises the question on whether the model has adequately identified and measured all the patient characteristics that can affect the hospital's mortality rate.

Despite the model's limitation, the information is useful and is being used in concert with the hospital's ongoing quality assurance and review activities.

Again, thank you for the opportunity to present this response. If you or anyone receiving this material have additional questions, please do not hesitate to call me at (609) 691-9000, extension 6201.

Sincerely,

Thomas J. Rayner
Acting Chief Executive Officer

TJR/jok

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	36	3	37	2
CE -- Cerebrovascular Accidents	21	0	21	0
GC -- Gastrointestinal Catastrophes	3	1	3	1
GI -- Gastrointestinal Disease	6	1	6	1
GU -- Urologic Disease	3	1	3	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	2	0	2	0
HM -- Severe Chronic Heart Disease	17	2	17	2
HS -- Severe Acute Heart Disease	38	4	39	3
ME -- Metabolic/Electrolyte Disturbances	7	0	6	1
OP -- Orthopedic Disorders	1	0	1	0
PN -- Pulmonary Disease	16	3	16	3
RN -- Renal Disease	4	0	4	0
SE -- Sepsis	7	0	7	0
TR -- Severe Trauma	1	0	1	0
EY ~~OP~~ -- Ophthalmalogic Disease	1	0	1	0
UN -- Other Diagnoses	32	6	35	3
Total -- All Categories	195	21	199	17

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Our Lady of Lourdes Medical Center
1600 Haddon Avenue • Camden, New Jersey 08103
(609) 757-3500

Southern New Jersey Cardiac Diagnostic and Surgical Center
Regional Dialysis and Transplantation Center
Regional Perinatal Center
Regional Rehabilitation Center

October 16, 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Dept. of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

RE: Comments on the HCFA Mortality Data
Our Lady of Lourdes Medical Center, Camden, NJ
Medicare Provider No. 31-00-29

Our Lady of Lourdes Medical Center commends HCFA's latest efforts to give providers and consumers insight into the quality of medical care provided by American's health care institutions.

We are pleased that the actual mortality rates for our patients included in this analysis falls well within the range of predicted mortality rates, according to HCFA's own analysis. What makes our statistics even more impressive, however, is the fact that Our Lady of Lourdes Medical Center serves as a regional referral center for patients requiring complex cardiac diagnostic and surgical services, for patients with serious renal diseases and complications, and for patients requiring physical rehabilitation from strokes and brain injuries. As HCFA acknowledges, the statistical model used for this analysis does not take into account severity of illness. The fact that our statistics include many high-risk patients, and their inclusion still left Lourdes well within the range of predicted mortality rates for all diagnostic categories, speaks very well for the excellent medical care provided by our physicians, nurses, and other professional staff at our Medical Center.

Even with these results, the multi-disciplinary team of Lourdes' physicians and administrative representatives who analyzed the HCFA data are compelled to point out the shortcomings of the HCFA statistical model. Our three major criticisms are as follows:

1. As previously stated, consideration of the severity of illness of each patient is not adequately addressed in this analysis; this is a major shortcoming when one attempts to interpret results. Lourdes treats many critically ill patients; many are referred to us by other hospitals because of the clinical expertise of our tertiary services. This, HCFA's assumption that patients admitted to all hospitals are similar except with respect to the specific characteristics included in the model is not valid - particularly in our tertiary services, critically ill patients will have a higher

- *Sponsored by The Franciscan Sisters of Allegany, New York*
- *Member Allegany Health System, Inc.*
- *A major teaching affiliate of Jefferson Medical College of Thomas Jefferson University*

risk of dying than is accounted for by the characteristics included in the HCFA model. Again, despite the fact that we are treating such critically ill patients, Lourdes falls within the range of predicted mortality rates across all services measured by HCFA.

2. Another shortcoming of the HCFA analysis is that it does not take into account the socio-economic stratification of a hospital's patient base. Because of our urban location and our Franciscan mission to provide health care for all who seek our aid, regardless of ability to pay, we treat many people who have not had their health care needs addressed as compared with those in higher socio-economic groups. It is well documented that the poor tend not to seek preventive care as much as the general population; this results in poor health care maintenance for the individual. Often, they will not seek inpatient care until the severity of their illness or affliction is overwhelming. In the future, we feel that the socio-economic status of a hospital's service area should be factored into HCFA's statistical model in order to give a more accurate and representative picture of a hospital's actual patient care experience.

3. A third shortcoming of HCFA's analysis is that it includes patients who died within thirty days of admission to the hospital. It is our contention that the hospital has no control or influence over a patient once he or she is discharged from the hospital. Any deaths that might have occurred after discharge from the hospital can be attributed to any one of a number of factors, all outside of the direct control of the hospital. We understand HCFA's attempt to refine its model by including this measure in the analysis, but we strongly contend that inclusion of patients who have died post-hospitalization gives neither providers nor consumers any basis on which to further measure quality of care provided on an inpatient level.

At the institutional level, we continue to measure and monitor the quality of medical care provided at Our Lady of Lourdes Medical Center through a variety of means. We will continue our efforts to provide the highest medical care possible to all patients who seek our assistance. Our Lady of Lourdes Medical Center looks forward to continuing to work with HCFA to provide requested information and to help refine the model used to attempt to measure the quality of care provided in American hospitals. We thank HCFA for the opportunity to respond to this most recent analysis.

Sincerely,

S M Elizabeth

Sr. M. Elizabeth Corry, O.S.F.
President and Chief Executive Officer

John P. Capelli, m.d.

John P. Capelli, M. D.
Vice President, Medical Affairs

rf

Overlook Hospital

Summit, New Jersey 07901 Telephone 201-522-2000

October 28, 1987

MEDICARE PROVIDER #310051

Dr. William L. Roper, Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for the opportunity to respond to the HCFA Medicare Mortality data and the proposed December 1987 publication of this data.

Reviewing the statistics, it is apparent that Overlook falls within the national range of predicted mortality rates of each of the 16 diagnostic categories. Our Quality Assurance Department reviewed the data for reliability and, with minor exceptions, the HCFA data does reflect Overlook's patient data base.

While the proposed methodology is apparently better than the raw mortality data distributed in 1986, there is still no evidence to suggest that the formula would identify hospitals with quality of care problems. A greater than average mortality rate more likely reflects a hospital that cares for a larger number of patients with a greater severity of illness. We hope that when the statistics are published in December, that the general public will not be encouraged to "shop" for hospitals based on mortality rates as such rates do not provide valid, useful information for judging overall hospital performance. In addition, we hope the public will be made clearly aware of at least the following points:

- As stated in the Federal Register, "not all factors affecting the probability of death are included in the model used to predict expected death rates."
- Genetic background and a tendency for certain types of chronic and terminal illnesses are not considered in the model.
- The data ignores the patient who has not been in the hospital recently, but whose death is the result of inadequate care provided outside the hospital setting (i.e. nursing homes, managed care situations, HMO's).

As part of a comprehensive Quality Assurance programs, all deaths that occur within Overlook are reviewed on a case-by-case basis by appropriate physician peer reviewers. Any case that is found to have a variation in the care rendered is referred to the Medical and/or Surgical Care Review Committee for case discussion, action and resolution.

Again, thank you for the opportunity to present this response. This preliminary release of data should allay confusion and misinterpretation, and has permitted hospitals sufficient time to educate the media and public regarding a variety of public issues.

Sincerely,

Michael J. Sniffen

Michael J. Sniffen
President

/lkw

PASCACK VALLEY HOSPITAL
OLD HOOK ROAD, WESTWOOD, N.J. 07675
(201) 358-3000

GEORGE M. HASKEW
President

LOUIS R. YCRE, Jr.
Executive Director

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Thank you for providing us the mortality information on Medicare beneficiaries treated in our hospital (Pascack Valley Hospital, Westwood, New Jersey, Hospital provider number 310037) in 1986. We appreciate the opportunity of reviewing the information and providing comments to you prior to its publication.

We are also happy to know that our actual mortality rate is low. The Board of Trustees, the administrative staff and the medical staff value quality care and are committed to provide quality health care at a reasonable cost, not only to Medicare patients, but to our community in general.

The mortality rate HCFA has provided will be reviewed by our hospital Quality Assurance Committee. Peer review and mortality review have always been part of every medical staff responsibility and any indication of potential quality problem is promptly investigated and corrected when appropriate.

In verifying the information you sent us, we found some discrepancies. Please see the attached. Five patients were discharged alive from Pascack Valley Hospital. Three of these patients are still alive according to the attending physicians; one was transferred to an acute care facility and one expired a day after discharge as verified by the attending physician.

Once again Dr. Roper, thank you for sending the mortality information to us. The entire PVH team displayed a great sense of pride when I shared the statistics with them. They know it reflects well on their continued effort to provide quality care for our patients.

Sincerely yours,

Louis R. Ycre, Jr.
Executive Director

LRY:pd

Attachment

ATTACHMENT

MORTALITY DATA VERIFICATION

The following patients were alive at time of discharge contrary to HCFA mortality data:

1. [redacted]
   Discharge Date: 12-19-86. Transferred to Nursing Home; still alive, verified with M.D.'s office.
   Admitted: 12-12-86. Discharged: 12-19-86. Date of Death: 12-19-86.
   Correction: Admitted: 12-12-86. Discharged: 12-19-86. Not Expired.

2. [redacted]
   Discharge Date: 7-7-86. Discharged home. Still alive, verified with M.D.
   Admitted: 10-30-86. Discharged 11-2-86. Date of Death: 11-2-86.
   Correction: Admitted: 7-7-86. Discharged: 7-7-86. Not Expired.

3. [redacted]
   Discharge Date: 11-2-86. Still alive, verified with M.D.
   Admitted: 10-30-86. Discharged 11-2-86. Date of Death: 11-2-86.
   Correction: Admitted: 10-30-86. Discharged: 11-2-86. Not Expired.

4. [redacted]
   Discharge Date: 5-25-86. Transferred to Beth Israel Hospital on 5-25-86.
   Admitted: 5-24-86. Discharged: 5-25-86. Date of Death: 6-9-86.
   Correction: Admitted: 5-24-86. Discharged 5-25-86. Not Expired.

The following patients died in the hospital not after discharge - HCFA date of death erroneous.

1. [redacted] [redacted]
   Admitted: 3-19-86. Discharged: 3-23-86. HCFA Date of Death: 3-31-86.
   Correct Date of Death: 3-23-86.

2. [redacted] [redacted]
   Admitted: 10-5-86. Discharged: 10-10-86. HCFA Date of Death: 10-31-86.
   Actual Date of Death on Medical Record: 10-10-86.

3. [redacted] [redacted]
   Admitted: 4-21-86. Discharged: 4-28-86. HCFA Date of Death: 4-20-86.
   Actual Date of Death: 4-28-86.

4. [redacted]
Admitted: 4-3-86. Discharged: 4-14-86. HCFA Date of Death: 4-15-86.
Actual Date of Death: 4-14-86.

5. [redacted]
Admitted: 3-10-86. Discharged: 3-11-86. HCFA Date of Death: 3-31-86.
Actual Date of Death: 3-11-86.

6. [redacted]
HCFA Date: Admitted: 10-27-86. Discharged: 11-05-86.
Date of Death: 11-26-86.
Acute Trauma. Patient was readmitted on 11-25-86 in acute renal failure; 10-27-86 was previous admission for fractured hip. Patient died 11-26-86 after 1 day stay.

Kimball
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October 26, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Medicare Provider #310084

Dear Doctor Roper:

The mortality information about Medicare participants cared for in this Medical Center has been given careful study, and the following comments are submitted for your consideration.

The Quality Assurance Program of Kimball Medical Center is very active in the review of care given to the patients served by this facility. This review involves both concurrent and retrospective mechanisms. Corrective actions for identified problems are implemented and are monitored for subsequent compliance.

Evaluation of the Metabolic/Electrolyte Disturbances - deaths referred from the Health Care Financing Administration revealed that approximately eighty-three percent (83%) of the patients reviewed were admitted from nursing homes. The majority of these patients were found to have other significant serious medical conditions that contributed to the severity of their illness and death. No pattern of substandard care was identified in this review. It was concluded that this death rate is not an indication of the quality of care given, but rather a result of the severity of illness in this group of elderly patients from nursing homes.

Review of the Severe Chronic Heart Disease deaths referred from the Health Care Financing Administration revealed that six patients were discharged alive and may have subsequently expired. Any relationship between this hospital stay and events following discharge is unknown. Thirteen patients had additional serious medical conditions which contributed in a significant manner to their deaths. There was no pattern of substandard care identified in the review of this group of patient's hospitalizations.

Evaluation of the Pulmonary Disease deaths referred from the Health Care Financing Administration revealed that approximately seventy percent (70%) of the cases reviewed were admitted from nursing homes. Approximately sixty-seven percent (67%) of these patients were over eighty years of age. Seven patients in this review sample were discharged alive and may have expired at a later date. The relationship of the hospital stay of these patients to subsequent events is unknown. There was no pattern of substandard care identified in the review of these cases. The principal diagnosis, or the reason for which the patient was hospitalized was inappropriate for this category of diagnosis in three cases.

Kimball Medical Center has for many years served an extremely large and expanding nursing home patient population. These patients tend to be more incapacitated than those of a similar age in the general population. While many patients eligible for Medicare from retirement communities and from the general communities are served by this institution, the deaths in the diagnostic categories reviewed appear to have a high representation of patients from nursing homes. This mortality rate appears to be a reflection of the severity of illness in this subgroup of elderly patients. This review did not disclose any pattern of substandard health care.

Thank you for the opportunity to conduct a review of this information. Please be assured of the dedication of Kimball Medical Center to the highest possible quality of health care.

Very truly yours,

KIMBALL MEDICAL CENTER

James Fitzpatrick
James J. Fitzpatrick, M.D.
Vice President of Medical Affairs

JJF:DC

Raritan Bay
Medical Center

530 New Brunswick Avenue, Perth Amboy, New Jersey 08861 • (201) 442-3700

PROVIDER #310039 October 20, 1987

RESPONSE TO HCFA's 1986 MEDICARE MORTALITY DATA RELEASE

Raritan Bay Medical Center welcomes the opportunity to respond to HCFA's current release of data on hospital mortality rates as they relate to Medicare patients.

While Medical Center mortality rates for Medicare fell well within HCFA's range of predicted rates, a thorough analysis of hospital records, as well as, research on the statistical methods and policy motivated bias of HCFA's statistical model, was performed.

The data used by HCFA indicate that 2823 Medicare patients were treated at Raritan Bay Medical Center in 1986, 385 of which died within 30 days of admission. Of these, 351 died while still an inpatient and 34 died after discharge. Our own records indicate that 5223 Medicare admissions occurred in that year. This difference is apparently due to multiple admissions of patients to the hospital, which are not included in HCFA's data. Of the deaths HCFA reported, 354 actually died as inpatients and 31 died after discharge. It is not possible to verify the percentage of patients dying after discharge, as information concerning death after discharge is not included in the patient's medical record.

Without the specific information regarding the billing data available to HCFA in calculating the predicted mortality rate, it is not possible to verify the accuracy of the data used in your analysis.

Our review of the issues has prompted the following comments. The relative confidence with which hospitals and the public should view the predicted mortality rates appears to be inflated due to the implication, in your statistical methods, that the predicted rates should be taken as an accepted standard. The model assumes that the predicted mortality rate is an estimate of what the hospital's mortality rate would be if its patients received average care. No provision is made for the possibility that the prediction itself may be incorrect. The only source of error which is recognized, is chance. We suggest that it is precisely the reliability of the prediction and not the deviation from the predicted range, that is most beneficial to hospitals and consumers.

In assessing the reliability of the HCFA model, of primary concern is whether it has accounted for all the patient characteristics that can affect a hospital's death rate. The most critical of these is how sick a patient is.

RESPONSE TO
HCFA's 1986 MEDICARE MORTALITY
DATA RELEASE

Severity of illness, general health, stage of illness, psychological factors and family support are patient characteristics which are not accounted for in the HCFA model. It is not the variance from the prediction which suggests a measure of quality, but the degree to which deviations can be attributed to the quality of patient care.

In addition to limitations of the HCFA model to produce reliable predictions of mortality, the validity of the model itself, that is the relationship between mortality and hospital performance has, to our knowledge, never been documented. As an advocate of appropriate quality management, Raritan Bay Medical Center suggests that HCFA undertake a study to verify and measure the relationship between their statistical results and hospital quality, through medical record review.

Our internal review of those mortality records included in the HCFA report are attached. Nine categories of errors in the HCFA data were noted, including the following: Inclusion of an admission other then the last, wrong admission or discharge date, wrong diagnosis, wrong date of death, inclusion in an incorrect clinical category, inpatient mortality counted as outpatient, outpatient mortality counted as inpatient, transfer of patient to another facility, and living patient listed as deceased.

Raritan Bay Medical Center is recognized as a leader in aggressive quality management. We have, both prior and subsequent to HCFA's data release, maintained an extensive quality review program which includes review of all mortalities, not only Medicare. Our program extends considerably further than elemental mortality review, to include comprehensive review of the critical aspects of care which we provide, toward the goal of prevention of patient events which are not a natural consequence of the disease or treatment. In addition, the patient population which we service includes many who are critically and terminally ill, as well as, a high ratio of indigent patients who have been shown to wait longer for care and present sicker upon admission. Medical Center programs such as our Hospice, Renal Dialysis, Cardiac Rehabilitation and Alcohol and Chemical Dependence Treatment programs are designed to treat seriously ill patients.

Over the past several weeks, the Peer Review Organization of New Jersey (PRO) has also distributed to hospitals, their statistical analysis on Medicare Mortalities in 1986. PRO's methodology differs from HCFA's and is not directly comparable. PRO intends to release their report to the public prior to HCFA's release. Although Raritan Bay Medical Center fell within the predicted range of each of the two sets of numbers, we caution that this information not be used by consumers as a barometer of quality. Quality can be and is, measured in our institution, through indepth medical record review by peers.

We recognize our responsibility to the community and acknowledge our commitment to maintaining the highest standards of quality based on sound medical principals, however, given the limitations of the statistical model and the fact that validation of the model has not occurred, HCFA's stated intent that the information be used by consumers in making decisions about their health care is both premature and potentially misleading.

RARITAN BAY MEDICAL CENTER
Provider # 310039
(NOT FOR PUBLICATION)

ANALYSIS of HCFA 1986 MEDICARE
MORTALITY LIST

October 19, 1987

PATIENT SURNAME (First 6-letters)	HIC ID NUMBER	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	COMMENTS
[redacted]	[redacted]	4-14-86 4-14-86	5- 4-86 5- 4-86	5- 5-86 5- 4-86	
[redacted] (RBMC)	[redacted]	3- 1-86 3- 1-86	3-10-86 3-10-86	3-31-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	5- 7-86 5- 7-86	5-12-86 5-12-86	5-20-86 ---	Discharge to Nursing Home.
[redacted] (RBMC)	[redacted]	2-28-86 2-28-86	3- 3-86 3- 3-86	3-21-86 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	4- 4-86 4- 4-86	4-11-86 4-11-86	4-17-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	7-10-86 7-10-86	7-30-86 7-30-86	7-31-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	12-29-86 12-29-86	12-29-86 12-29-86	12-29-86 12-29-86	Problem: HCFA Princ.DX - 199.0 (Malignant neoplasm, unspecified site) RBMC Princ.DX - 578.9 (Hemorrhage of GI tract, unspecified) Old Category - CA New Category - GC
[redacted] (RBMC)	[redacted]	7- 6-86 7- 6-86	7-16-86 7-16-86	7-30-86 7-16-86	
[redacted] (RBMC)	[redacted]	1-10-86 1-10-86	1-25-86 1-25-86	1-25-86 1-25-86	Problem: HCFA Princ.DX - 434.9 (Cerebral infarction) RBMC Princ.DX-434.1 (Cerebral Embolism) No change in Category CE
[redacted]	[redacted]	9-29-86 9-29-86	10- 7-86 10- 7-86	10-18-86 ---	Transferred to Nursing Home - No further info.
[redacted] (RBMC)	[redacted]	8-26-86 8-26-86	9- 8-86 9- 8-86	9-10-86 ---	Transferred to Nursing Home - No further info.
[redacted] (RBMC)	[redacted]	10-10-86 10-10-86	10-13-86 10-13-86	10-24-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	3-26-86 3-26-86	3-29-86 3-29-86	4- 9-86 ---	Discharge to home - No further info.

RARITAN BAY MEDICAL CENTER
Provider # 310039

ANALYSIS of HCFA 1986 MEDICARE MORTALITY LIST

October 19, 1987
PAGE 2

(NOT FOR PUBLICATION)

PATIENT SURNAME (First 6-letters)	HIC ID NUMBER	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	COMMENTS
[redacted] (RBMC)	[redacted]	4- 4-86 4- 4-86	4- 7-86 4- 7-86	4-22-86 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	1-27-86 1-27-86	2- 4-86 2- 4-86	12-12-86 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	3- 5-86 3-21-86	3-11-86 3-21-86	3-21-86 3-21-86	HCFA Category - GU (Urologic Disease) RBMC Category - UN (Other Diagnoses)
[redacted] (RBMC)	[redacted]	9- 7-86 9- 7-86	9- 9-86 9- 9-86	9-26-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	5-15-86 5-15-86	5-22-86 5-22-86	6- 5-86 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	5-11-86 5-11-86	5-15-86 5-15-86	5-15-86 5-15-86	Problem: HCFA Princ.DX - 429.2 (Cardiovascular disease, unspecified) RBMC Princ.Dx - 557.0 (Vascular insufficiency of intestine) HCFA Category - HL RBMC Category - GI (both low risk) (PLEASE NOTE: 429.2 does not fit into HCFA's HL Range of Codes.)
[redacted] (RBMC)	[redacted]	5- 4-86 5- 4-86	5-11-86 5-11-86	5-24-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	12- 6-86 12- 6-86	12-14-86 12-14-86	12-31-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	9- 2-86 9- 2-86	9-20-86 9-20-86	9-25-86 ---	Discharge to Nursing Home.
[redacted]	[redacted]	7-26-86 7-26-86	7-31-86 7-31-86	8- 7-86 ---	Discharge to home - No further info.
[redacted]	[redacted]	2-20-86 2-20-86	3- 3-86 3- 3-86	3- 3-86 ---	Seen on 3-26-86 as out patient - No record of death here.

RARITAN BAY MEDICAL CENTER
Provider # 310039
(NOT FOR PUBLICATION)

ANALYSIS of HCFA 1986 MEDICARE
MORTALITY LIST

October 19, 1987

PATIENT SURNAME (First 6-letters)	HIC ID NUMBER	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	COMMENTS
[redacted] (RBMC)	[redacted]	2- 5-86 2- 5-86	2-13-86 2-13-86	2-13-86 2-13-86	Problem: HCFA Princ.DX - 410.9 (Myocardial infarction, unspecified site) RBMC Princ.Dx - 428.0 (Heart failure) HCFA Category - HS RBMC Category - HM (both high risk)
[redacted] (RBMC)	[redacted]	8- 9-86 8- 9-86	8-22-86 8-22-86	8-30-86 8-30-86	Died 8-30-86 in ER - RBMC.
[redacted] (RBMC)	[redacted]	4- 4-86 4- 4-86	4-16-86 4-16-86	4-27-86 ---	Discharge to Nursing Home.
[redacted] (RBMC)	[redacted]	10- 1-86 10- 1-86	10- 5-86 10- 5-86	10- 6-86 10- 5-86	
[redacted] (RBMC)	[redacted]	2-28-86 2-28-86	3- 9-86 3- 9-86	3- 9-86 ---	Discharge to Home 3-9-86. Did not expire.
[redacted] (RBMC)	[redacted]	6- 5-86 6- 5-86	6-16-86 6-16-86	6-19-86 ---	Discharge to V.A. Hospital.
[redacted] (RBMC)	[redacted]	12- 7-86 12- 7-86	12-20-86 12-20-86	12-29-86 ---	Discharge to home- No further info.
[redacted] (RBMC)	[redacted]	10- 7-86 10- 7-86	10-15-86 10-15-86	10-16-86 10-15-86	
[redacted] (RBMC)	[redacted]	3-17-86 3-17-86	3-31-86 3-31-86	4- 2-86 ---	Discharge to Nursing Home.
[redacted] (RBMC)	[redacted]	3- 7-86 3- 7-86	3-26-86 3-26-86	3-31-86 ---	Discharge to Nursing Home.
[redacted] (RBMC)	[redacted]	1-20-86 1-20-86	1-22-86 1-22-86	1-22-86 1-22-86	Problem: HCFA Princ.DX - 284.9 (Aplastic anemia, unspecified) RBMC Princ.DX - 284.8 (Other specified aplastic anemia) No change in Category - UN.

RARITAN BAY MEDICAL CENTER
Provider # 310039
(NOT FOR PUBLICATION)

ANALYSIS of HCFA 1986 MEDICARE
MORTALITY LIST

October 19, 1987
PAGE 4

PATIENT SURNAME (First 6-letters)	HIC ID NUMBER	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	COMMENTS
[redacted] (RBMC)	[redacted]	1-18-86 -18-86	2- 9-86 2- 9-86	2- 9-86 2- 9-86	Problem: HCFA Princ.DX - 348.1 (Anoxic brain damage) RBMC Princ.DX - 991.6 (Hypothermia). No change in Category - UN.
[redacted] (RBMC)	[redacted]	5-31-86 5-31-86	6-17-86 6-17-86	6-23-86 ---	Discharge to Nursing Home.
[redacted] (RBMC)	[redacted]	5-26-86 5-26-86	5-30-86 5-30-86	6- 5-86 6- 5-86	Died in ER 6-5-86 RBMC.
[redacted] (RBMC)	[redacted]	11-15-86 11-15-86	11-16-86 11-16-86	12- 3-86 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	12-16-86 12-26-86	12-24-86 1- 8-87	1- 9-87 1- 8-87	Died in hospital 1-8-87.
[redacted] (RBMC)	[redacted]	12-19-86 12-19-86	12-24-86 12-24-86	1- 9-87 ---	Discharge to home - No further info.
[redacted] (RBMC)	[redacted]	12- 6-86 12-26-86	12-14-86 1- 4-87	1- 1-87 1- 4-87	Died in hospital 1-4-87.

PROVIDER #310039 ATTACHMENT 5 RARITAN BAY MEDICAL CENTER

(NOT FOR PUBLICATION)

Worksheet 1: Analysis of Reporting Errors

	Diagnostic Category		Deaths Reported by HCFA		Deaths Verified by Hospital*	
			In-hospital	Post-hospital	In-hospital	Post-hospital
52	CA -- Cancer	51	45	7	46	5
35	CE -- Cerebrovascular Accidents	12	33	2	34	1
11	GC -- Gastrointestinal Catastrophes	12	11	0	12	0
22	GI -- Gastrointestinal Disease	23	17	5	18	5
10	GU -- Urologic Disease	9	8	2	7	2
0	GY -- Gynecologic Disease	0	0	0	0	0
14	HL -- Low Risk Heart Disease	13	12	2	11	2
38	HM -- Severe Chronic Heart Disease	39	34	4	34	5
59	HS -- Severe Acute Heart Disease	58	58	1	57	1
26	ME -- Metabolic/Electrolyte Disturbances	26	24	2	24	2
5	OP -- Orthopedic Disorders	5	4	1	4	1
40	PN -- Pulmonary Disease	40	37	3	37	3
3	RN -- Renal Disease	3	3	0	3	0
12	SE -- Sepsis	12	11	1	11	1
10	TR -- Severe Trauma	10	10	0	10	0
1	~~00~~ EY Ophthalmalogic Disease	1	1	0	1	0
47	UN -- Other Diagnoses	48	43	4	45	3
385 HCFA	Total -- All Categories	385 RBMC	351	34	354	31
			385 HCFA		385 RBMC	

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Riverview Medical Center 35 Union Street • Red Bank, New Jersey 07701 • (201) 741-2700

October 26, 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Washington, D. C. 20201

ID#: 310034

Dear Dr. Roper:

The following is our hospital's response to the mortality study to be released in December 1987.

"We will use whatever data is necessary to allow us to serve our patients better and will add this to our current list of review processes in its appropriate place and emphasis."

Very truly yours,

James B Berg

James B. Berg
Acting President

JBB:mrm

Leading Because We Care

Kennedy Memorial Hospitals
at Saddle Brook

300 Market St. ■ Saddle Brook, NJ 07662 ■ (201) 368-6000

October 14, 1987

William L. Roper, M.D.
Administrator
HCFA
P.O. Box 26684
Baltimore, Maryland, 21207

Dear Doctor Roper,

Re: Mortality Data

Thank you for sharing with us our hospital mortality data prior to the December 1987 HCFA release.

Although we appreciate receiving this data for in-house review, release of this data to the consumer via the news media presents a few concerns.

We agree with your goal of developing measures to determine severity of illness. We also support further study on the impact of co-morbid conditions; the impact of social and economic factors; the influence of a patient's wishes on his or her care; and other factors affecting the probability of death.

The release of data such as this may increase consumers' apprehensions concerning a hospital's performance - - many men and women may not thoroughly understand the data, its purposes or its meaning. It is our fear that this misunderstanding might discourage individuals from seeking medical attention in a timely manner, possibly resulting in more severe illnesses, longer hospitalizations and increased medical costs.

We suggest that HCFA provide representatives of the news media with an in-depth explanation of the mortality rate data upon release of the information. Hopefully, this would help the press present the information clearly and appropriately.

We appreciate the opportunity to comment prior to the release of the data and hope that this practice of previewing data will continue in the future.

Sincerely,

Paul R Cardillo

Paul R. Cardillo
Executive Director

Hospital #310085

cc: New Jersey Hospital Association

The Memorial Hospital
of Salem County, Inc.

Close Enough to Care...

October 19, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Washington, DC 20201

Dear Dr. Roper:

We appreciate the opportunity to review and comment on the Medicare mortality statistics before wide-spread publication. We are also pleased to find that our mortality rates at the Memorial Hospital of Salem County were all within the predicted ranges of those who would have been expected to die.

There were three areas of concern that should be addressed when these statistics are made public: (1) the importance of the age of patients who died, (2) the difficulty of assessing the care and follow-up of those who died after leaving the hospital, and (3) the statistical errors.

As to the first concern, it is all too evident that aging affects mortality. For example, 114 of the 196 Medicare patients dying after treatment in our hospital in 1986 had already lived beyond their expected age of 75. 81 were over 80, and 13 were in their 90's. At what point can we honestly say, "there's a time to die"? Our goal as health providers is to assure the best care available while they're alive.

Relative to the second concern, your figures show that 22 patients died after they were discharged from our hospital. 17 of these had gone home, and five were admitted to a nursing home. Six of these patients had cancer, two had strokes, five had heart disease, five had lung disease, three had gastro-intestinal catastrophy, and one had kidney disease. It is very difficult to ascertain (a) how may of these patients would not have died if they had not been discharged from the hospital, (b) how many of them had adequate follow-up care, and (c) how many were compliant with their medication. These are areas of real concern that cannot be addressed by statistics alone.

/continued

Salem-Woodstown Road
Salem, NJ 08079
(609) 935-1000

An affiliate of South Jersey Health Corporation

This leads to the last concern--statistics! It is difficult to prevent discrepancies in figures, and this always leads to questions about the projected conclusions. In reviewing your statistics, we found that one patient was listed as having died one day before she was discharged [redacted]; and four patients tabulated as deaths after discharge were found to have died while still in the hospital [redacted].

Aside from these concerns, we appreciate the opportunity to review our mortality rates in comparison with those predicted for similar patients nation-wide. Thank you for this chance to comment before wide-spread publication.

Sincerely,

John S. Madara, MD
Medical Director

Jos. Michael Galvin, Jr., FACHE
President

JSM/la

Shore Memorial Hospital

Caring for the People of South Jersey

October 21, 1987

William L. Roper, M.D.
Department of Health & Human Services
Health Care Financing Administration
The Administrator
Washington, D.C. 20201

Dear Dr. Roper;

Thank you for the opportunity to review and respond to the 1986 Medicare Death data, compiled by H.C.F.A.

First, let me say that our ongoing Quality Assurance Program had already reviewed all of the mortalities that occurred in our hospital during 1986. Our mortality review is only one part of our comprehensive Q.A. Program. Although a few minor questions were raised during that process, our overall assessment was that there were no unusual or undesirable patterns of care identified.

Second, let me address the data presented. First, our overall death rate falls within predicted ranges. When examining the individual area in your report, we find only one area to re-evaluate. No other area is elevated nor depressed out of expected range.

The area of question is the metabolic/electrolyte disturbance category. Out of 73 cases, 42% died (predicted 12-35%). The 29 cases that you present in this category reveal the problem. Seventeen cases were "No Code" cases. Nine of these were terminal cancer, 3 were terminal renal failure due to diabetes.

In my opinion, this category is too diverse to draw a singular conclusion. Nine cases were cancer patients that had been previously hospitalized and diagnosed. The current DRG system does not allow this DRG category to be coded twice for the same patient. Therefore the admission for dehydration, etc., is coded in the metabolic category. As a foot note, if we had improved area wide services (i.e. Hospice or Nursing Home Care) available for many of these single, dying people, they may not get admitted to the hospital to die. The 3 cases of renal failure secondary to diabetes mellitus should be categorized in renal failure. This, I believe, should be changed in future H.C.F.A. Death Analysis.

Shore Road & New York Avenue
Somers Point, New Jersey 08244
609/653-3500

The remainder of the cases were all unfortunate, inevitable deaths. The average age of these 29 patients was 79.13 years old (with a 58 and a 62 year old also). Seven of the cases came to the ER having been found at home in a coma by the Rescue Squad (average age 84.71).

In summation, your death statistics confirm our earlier mortality review to be comprehensive. We at Shore Memorial Hospital find no unusual nor correctable patterns of death here. We await further correspondence from you and feel confident that it will also confirm the high quality practice of medicine being delivered at Shore Memorial Hospital.

Sincerely,

Angelo Sparagna III MD / KAS

Angelo Sparagna, III, M.D.
Director of Medical Affairs

AS/kas

SOMERSET
MEDICAL CENTER
110 REHILL AVENUE • SOMERVILLE, NJ 08876-2598 • (201) 685-2805

William J. Monagle, F.A.C.H.E.
President

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We have received HCFA's mortality statistics relating to Somerset Medical Center and respectfully submit the following response, which is provided as a means of "qualifying" the data from our perspective as a health care provider.

While we recognize and appreciate HCFA's efforts to refine this year's analysis model, we nevertheless must state with the strongest emphasis that death rates alone are not an adequate indicator of quality of care.

Although the Freedom of Information Act requires public disclosure of this data, it must be disclosed in a responsible manner. HCFA itself understands the gravity of misleading conclusions, as evidenced by HCFA's quote in the Federal Register: "Not all factors affecting the probability of death are included in the model used to predict expected death rates." The obvious factors which are not taken into account are: severity index, genetic qualifiers, median age of the population and the quality of care provided once the patient has left the hospital setting.

Allow me to stress once again that the report will be a disservice to the public, who are rightfully seeking accurate health care information, if HCFA releases the data without emphasizing that death rates should not be used to define quality of care.

Regarding specifics within the data, HCFA's report identified 338 patients for Somerset Medical Center; of these, 47 (14%) died after leaving the hospital and 291 deaths occurred in the hospital.

Of the 47 patients who died after discharge, death was, regrettably but realistically, an anticipated outcome for many, or there may have been other factors involved which were totally unrelated to hospitalization.

Somerset Medical Center's Quality Assurance Department monitors all aspects of patient care on a continuing basis and utilizes mortality data as part of this ongoing process. Of the 291 in-hospital deaths, our quality assurance staff and physicians randomly reviewed 97 records, or 33 percent. Sex and age characteristics of this patient group are: 31 males and 56 females, with a mean age of 82, a median age of 83 and a mode of 88 (the age which most frequently appeared in the sample).

Of the cases reviewed:

1. Thirty-four percent were "no code" patients or those who refused further work-up, ie., those patients, who in consultation with family and physician chose not to have "heroic" measures utilized in prolonging life. In some cases, the patients refused various interventions, such as blood transfusions, x-rays, etc.

2. Twelve percent of the patients died less than 24 hours after admission. These patients were barely viable upon admission.

3. Seven percent of the patients were unresponsive on admission. These patients were either intubated in the field or coded immediately upon admission.

4. Thirty percent had terminal illness, such as cancer. Patients in this group were in the end stages of their disease. Many were being cared for at home by their families. Today, many patients choose to die at home with loved ones in familiar surroundings. Nevertheless, many patients come to the hospital, or are brought in by relatives or friends, to receive final comfort measures.

[Note: As would be expected, some overlap occurred in the above categories.]

5. Forty-three percent of the patients in this sample did not fit the medical category assigned by HCFA.

In conclusion, Somerset Medical Center recognizes the very real public need for health care information that HCFA is attempting to address through the mortality data model. However, we stress once again that mortality data alone does not provide valid, useful information for judging overall hospital performance. Without a severity of illness adjustment, among other considerations, mortality rates simply cannot be used to grade hospital care. We urge you to strongly make this point to the public upon disclosure of the data.

Very truly yours,

William J. Monagle
President

SOUTH AMBOY MEMORIAL HOSPITAL
AND COMMUNITY MENTAL HEALTH CENTER
540 BORDENTOWN AVE., SOUTH AMBOY, NJ 08879
(201) 721-1000

CHIEF EXECUTIVE OFFICER
IRV J. DIAMOND

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Admin.
Washington, D.C.

Dear Dr. Roper,

We are pleased to have the opportunity to respond to the data received.

Mortality statistics help identify possible problem areas and thus guide the ongoing QA program to modify and reinforce systems for better screening. This report showed some discrepancy with our internal data and we are still in the process of verifying the information.

We will however utilize this report as a tool to focus on potential problems and will continue to gather more data to further intensify our current monitoring system. This will ensure that the highest possible quality of care is provided to our community.

Sincerely,

N. Doropan, RN
Supervisor
Patient Services

SOUTHERN OCEAN COUNTY HOSPITAL
1140 WEST BAY AVENUE, MANAHAWKIN, NEW JERSEY 08050 - 609-597-6011

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Washington, DC 20201

Dear Doctor Roper:

The accompanying data on hospital mortality released by the Health Care Financing Administration offers the institution and the consuming public an opportunity to review a single measure of a hospital's performance. While inconsistencies have been noted, the data accurately reflects inpatient Medicare mortality rates in 1986 for Southern Ocean County Hospital.

Mortality rates are but one indicator used to monitor quality. Many other indicators can and should be examined. Southern Ocean County Hospital has an extensive and sophisticated program of Quality Assurance that evaluates not only mortality data, but other quality indicators, such as infection rates, complication rates and non-mortality outcomes. While mortality rates are a valuable aspect of this type of review, the depth and the breadth of an institution's Quality Assurance Program must be recognized. A sound Quality Assurance effort evaluates far more than mortality information.

Data released by HCFA this year reflects a case mix analysis but offers no adjustment for severity of illness. As inpatient length of stay drops, the outpatient treatment becomes more common, the intensity of service provided to Medicare recipients, as well as the relative severity of their illnesses, has dramatically changed. This increase in the intensity of service requires the assessment of multiple quality indicators and further illustrates the need for sophisticated Quality Assurance Programs.

In summary, while mortality data is an indicator for monitoring quality care, it must be combined with a comprehensive Quality Assurance Program that resolves problems and educates our physicians and employees in order to provide our patients with high quality services.

Sincerely,

T.R.

Theodore R. Rhoads
Administrator

TRR/mdt
cc: P. Zweier
R. Irvin, M.D.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

SAINT BARNABAS MEDICAL CENTER

RONALD J. DEL MAURO
President and Chief Executive Officer

JOHN D. PHILLIPS, M.H.A.
Executive Vice President

October 27, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Enclosed please find our comments regarding the Mortality Data for Saint Barnabas Medical Center which are to be included in the Mortality Data release scheduled for December, 1987.

Upon review of this data, we have identified errors which are listed below. The correct information has been underlined for easy identification.

PATIENT I.D. #	DIAGNOSTIC CATEGORY	SURNAME	DATE OF DISCHARGE	DATE OF DEATH
[redacted]	[redacted]	[redacted]	01-22-86	01-22-86
[redacted]	[redacted]	[redacted]	11-08-86	11-08-86
[redacted]	[redacted]	[redacted]	07-19-86	07-19-86
[redacted]	[redacted]	[redacted]	12-04-86	12-04-86
[redacted]	[redacted]	[redacted]	12-28-86	12-28-86
[redacted]	[redacted]	[redacted]	05-10-86	05-31-86
[redacted]	[redacted]	[redacted]	12-27-86	12-27-86
[redacted]	[redacted]	[redacted]	11-27-86	11-27-86
[redacted]	[redacted]	[redacted]	09-29-86	09-29-86
[redacted]	[redacted]	[redacted]	06-21-86	06-21-86
[redacted]	[redacted]	[redacted]	02-21-86	02-21-86
[redacted]	[redacted]	[redacted]	11-18-86	11-18-86
[redacted]	[redacted]	[redacted]	11-13-86	11-13-86
[redacted]	[redacted]	[redacted]	12-18-86	12-18-86
[redacted]	[redacted]	[redacted]	10-09-86	10-09-86
[redacted]	[redacted]	[redacted]	01-20-86	01-20-86

Sincerely,

Ronald J. Del Mauro
President and Chief Executive Officer

RDM:cw
Encl.

OLD SHORT HILLS ROAD ■ LIVINGSTON, NEW JERSEY 07039 ■ (201)533-5000

A nonprofit, nonsectarian medical center, founded in 1865, and a major affiliate of the University of Medicine and Dentistry of New Jersey

SAINT BARNABAS
MEDICAL CENTER

RONALD J. DEL MAURO
President and Chief Executive Officer

JOHN D. PHILLIPS, M.H.A.
Executive Vice President

October 27, 1987

Saint Barnabas is pleased for the opportunity to respond to the 1986 Mortality data as prepared by the Health Care Financing Administration. We anticipate utilizing this HCFA data as a guiding mechanism to enhance the comprehensive Quality Assurance Program already in existence at Saint Barnabas Medical Center.

Saint Barnabas Medical Center is the largest acute care hospital in New Jersey, a state with the second oldest median-age population in the nation. Our Medical Center is a teaching institution and a major referral center for Oncology, Pulmonary Disease (which includes a nursing unit specifically for ventilator-dependent patients), End Stage Renal Disease, Orthopaedics (with extensive, invasive orthopaedic surgery) and burn care. The Burn Center is the only certified facility in the entire state. The Gynecologic Oncology Program is a regional program as is the Organ Transplant Program. More kidney transplants are performed annually at Saint Barnabas than in any other hospital in the state. We are one of the few hospitals in the state certified to conduct home continuous ambulatory peritoneal dialysis (CAPD) and hemodialysis training.

These specializations along with several geographic factors affect the severity of illness in our patient population. We are situated in a major industrial area and in a state shown to have one of the highest cancer rates in the nation. Moreover, our particular service area is affected by a significant shortage of nursing home beds, with the result that patients with chronic, degenerative conditions are often kept at home and thus admitted just prior to death. All of these factors produce an acuity level in the patient population that is far higher than the "average" hospital used by HFCA as a base in the study. Nonetheless, the HCFA mortality data indicate that Saint Barnabas falls well within the predicted mortality rates in every category investigated.

It is also important to note that a significant percentage of the cases investigated had a complication or comorbid condition (such as chronic hypertensive cardiovascular disease, pulmonary and renal disease) which was found to be the cause of death. Yet the HCFA study relates expiration to the patient's principal diagnosis exclusively.

OLD SHORT HILLS ROAD ■ LIVINGSTON, NEW JERSEY 07039 ■ (201)533-5000

A nonprofit, nonsectarian medical center, founded in 1865, and a major affiliate of the University of Medicine and Dentistry of New Jersey

The Quality Assurance Program at Saint Barnabas Medical Center encompasses a comprehensive, concurrent plan that employs daily review of medical, nursing and ancillary services. If required, a retrospective review is performed. Generic screens, as recommended by JCAHO, HCFA and our Peer Review Organization, are used for evaluations with complete analysis applied to unanticipated deviations. As a result of our ongoing Quality Assurance Program, a number of mechanisms have been put into place to prevent any repetition of deviant patterns in patient response to treatments. As a result of the constant monitoring process, physicians, nurses, department heads and quality assurance managers meet daily to watch for patterns and trends and to suggest new responses wherever appropriate. Individual practitioners are contacted for discussion and follow-up. At Saint Barnabas, the Quality Assurance Peer Review Program is concurrent as well as retrospective.

Complementing our Quality Assurance Program are a number of multi-disciplinary programs such as comprehensive discharge planning. In some cases, the attending physician contacts the Departments of Social Work Services and Physical Therapy prior to admission in anticipation of discharge planning and home care needs. In addition, the Patient Representative Department offers a patient advocacy program wherein "ombudsmen" respond to patient needs. Attempting to ward off problems whenever possible, the Patient Representatives interact with the healthcare team to solve problems should they arise. This program was the first in the state and has served as a model for other hospitals.

The data analyzed by HCFA for the Mortality Report have been thoroughly reviewed. Each expiration has been analyzed again, and in every instance we are satisfied that the quality of care administered at Saint Barnabas Medical Center is in full keeping with the high standards of the industry and our own institution.

We consider the HCFA guidelines as only the minimum standard and we will continue to enhance our own Quality Assurance Program as we have done previously.

Ronald J Del Mauro

Ronald J. Del Mauro, President
and Chief Executive Officer

Fred. M. Jacobs MD

Fred M. Jacobs, M.D.,
President, Medical Staff

St Clares · Riverside
MEDICAL CENTER

Telephone:

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for the opportunity to comment on the mortality data for patients who died within thirty days after admission to our hospital during 1986. Many man hours went into the preparation of these comments. We believe that they are accurate and conservative and that their publication, along with the raw mortality data, will enhance the value of the report.

Sincerely yours,

Joseph A. Trunfio, Ph.D.
Senior Vice President and
Chief Operating Officer

ATG/crh

Attachment

Pocono Road, Denville, New Jersey 07834

St Clares · Riverside
MEDICAL CENTER

Telephone:

COMMENTS CONCERNING MEDICARE PATIENTS WHO DIED WITHIN THIRTY DAYS AFTER ADMISSION DURING 1986

The Board of Trustees, the Medical Staff and the Administration of St Clares Riverside Medical Center advocate confidential peer review as a means of monitoring the quality of patient care. Our program consists of a Quality Assessment (Q.A.) department and Q.A. committees which report to the chairpersons of the clinical departments, the Medical Executive Committee and a standing committee of the Board of Trustees. The charts of all patients treated at the medical center are screened for the quality and appropriateness of care with special emphasis on those of patients who die or develop complications.

Our overall mortality rates and those in each category fell within the acceptable ranges. Nevertheless, recognizing that mortality rates alone are not an adequate measure of the quality of care and that the severity of the patients' illnesses were not considered, we present below some of our peer review findings.

Two hundred fifty Medicare patients are cited as having died within thirty days of admission. One of these is still alive in a nursing home. Of the remaining two hundred forty nine, two hundred five died in the hospital and forty four died after discharge from the hospital.

One or more uninvolved physicians review the record of each patient who dies in the medical center. After any necessary clarifying information has been received from the treating doctors, a report is sent to the Q.A. committee where the quality of care is further analyzed and appropriate actions taken. Opportunities to improve care in the future are sought and implemented when found. The Peer Review Organization of New Jersey also conducts an independent review of the quality of hospital care and communicates with the hospital when problems are found. In none of the two hundred five cases reported here was a communication received by the hospital indicating that poor quality care may have contributed to a patient's demise.

The attending physicians of the forty four patients who died after discharge from the hospital were contacted concerning the cause of death. Information was obtained for thirty eight patients. In virtually all instances, death was either imminent at the time of discharge as a result of an untreatable disease, or was predictable due to an ultimately fatal chronic debilitating condition.

To determine whether hospital care contributed to the patient's demise after discharge from the hospital, all forty four hospital charts were reviewed. Seventeen of these patients were between eighty and eighty nine years of

Pocono Road, Denville, New Jersey 07834

age and ten additional patients were ninety years of age or older. Forty had severe debilitating diseases and many were bedridden. Twelve had advanced malignancies which were considered to be preterminal. Twenty had been in a nursing home prior to admission, and twenty seven were transferred to a nursing home after discharge from the hospital. We concluded that none of the patients who died after discharge from the hospital, died as a result of poor hospital care. The advanced age of many of the patients, the prevalence of advanced malignancies, the nearly uniform presence of severe debilitating conditions and the frequency of nursing home stays prior to and following hospitalization indicate that these patients were very severely ill and support the premise that death was unavoidable.

10/22/87

The Sisters of Charity
Office of the Executive Director

St. Elizabeth Hospital
225 Williamson Street
Elizabeth, New Jersey 07207
(201) 527-5122

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Doctor Roper:

Enclosed please find St. Elizabeth Hospital's comments on the mortality data provided to us.

Thank you for the opportunity to verify the data and share our results with you.

Sincerely,

Sister Elizabeth Ann Maloney

Sister Elizabeth Ann Maloney
Executive Director

SEAM/cmf

Enclosure

The Sisters of Charity
Office of the Executive Director

St. Elizabeth Hospital
225 Williamson Street
Elizabeth, New Jersey 07207
(201) 527-5122

COMMENTS REGARDING HCFA MEDICARE MORTALITY RATES DATA
ST. ELIZABETH HOSPITAL--MEDICARE PROVIDER NUMBER 310072

All of St. Elizabeth Hospital's mortality rates for each category fall within the expected ranges provided by the Health Care Financing Administration. Since receiving this report in late September, St. Elizabeth Hospital has conducted a thorough review of all data provided.

Our Chief Financial Officer has validated that with minor exceptions, HCFA's data is accurate and a reflection of statistics at our facility. Those errors identified in relation to discharge date, date of death and, in one case, the duplicate reporting of a death have been delineated in the attached.

As part of St. Elizabeth Hospital's ongoing quality assurance program, all deaths occurring in our facility are thoroughly reviewed by the Medical Staff. Since 17 deaths contained in these statistics occurred after discharge, our Director of Quality Assurance has conducted a review of those cases. Seven of those deaths after discharge involved former patients who had been treated for relatively low risk conditions: two were classified as gastro-intestinal, three as urologic disease and two as low risk heart disease. In each of those seven cases, the patients had multiple comorbid conditions indicative of serious underlying disease.

Our Quality Assurance staff in conjunction with our Medical Staff will continue to closely monitor not only mortality data but all data related to outcome to ensure continued quality of patient care.

1986 HCFA MORTALITY LIST
VERIFICATION
DATE OF
ADMISSION, DISCHARGE, DEATH

Admission Date

All correct

Discharge Date

	Hic #	Name	Discharge Date
1) original correction	[redacted]	[redacted]	6/27/86 6/23/86

Death Date	Hic #	Name	Death Date
1) Original Corrected	[redacted]	[redacted]	1/01/86 12/31/85
2) Original Corrected	[redacted]	[redacted]	1/31/86 1/18/86
3) o c	[redacted]	[redacted]	10/07/86 10/06/86
4) o c	[redacted]	[redacted]	3/31/86 3/12/86
5) o c	[redacted]	[redacted]	1/31/86 1/14/86
6) o c	[redacted]	[redacted]	12/31/86 12/24/86

NOTE: [redacted] appears in both the subsequent year and current year as a duplicated death. Tolosa was admitted and expired in the same year and should not be included in the listing entitled "Patients Whose Death occured in a year subsequent to the year of Admission."

ST. FRANCIS
Medical Center
601 Hamilton Avenue Trenton, New Jersey 08629-1986 609-599-5000

October 15, 1987

William M. Roper, M.D., Administrator
Health Care Financing Administration
Department of Human Services
Washington, D.C. 20201

Medicare # 310021

Dear Dr. Roper:

Thank you for the opportunity to review and respond to The Health Care Financing Administration's release of data concerning mortality rates for Medicare patients admitted to St. Francis Medical Center in 1986.

As preparation for the release of this data, a multi-disciplinary group was formed to review and comment on the statistics provided. The committee validated that, with minor exceptions, HCFA's data is an accurate reflection of the approximately 2800 applicable Medicare admissions to our facility in 1986. However, it should be noted that 11% of those deaths occurred after discharge and we are unable to verify them.

As the HCFA report indicates and our review confirms, the actual mortality rate at St. Francis Medical Center in the 16 ICD-9 categories falls within the low range of the predicted mortality rate.

We are in agreement with HCFA, the American Hospital Association and the New Jersey Hospital Association, that the HCFA statistical model needs further refinement and that "the use of the information by itself to make judgements about the quality of care in an individual hospital" is not recommended. Death rates alone should not be used to define quality or as a consumer index for making health care decisions.

We realize that HCFA has taken steps to strengthen the statistical analysis method used in compiling this data. Nevertheless, we believe it does not accurately measure the severity of illness and co-morbidities of our patient population.

Of all quality assurance indicators, mortality, when considered separately, is one of the least sensitive indicators of quality since, in many instances, mortality is a natural and unavoidable outcome. We feel that it is important that the public be educated to the fact that mortality data is just one indicator in a quality assurance program. Only when integrated with information received through a comprehensive quality assurance program can mortality data begin to take on meaning.

We believe the Quality Assurance Program at St. Francis provides an effective mechanism for monitoring patient care in an appropriate and timely manner. Our Quality Assurance Program is in compliance with the New Jersey Department of Health licensure requirements and in voluntary compliance with the Joint Commission on Accreditation of Hospitals.

Our Quality Assurance Program was developed in response to our on-going commitment to quality patient care for all patients served by the Medical Center. It is a planned, systematic process that requires the participation of the medical staff, hospital departments, hospital committees, and hospital personnel. The objective of the process is to identify potential problem areas, determine the presence of trends, develop solutions, and avoid recurrence. We believe our Quality Assurance Program fulfills its objective to provide quality care to our patients.

Sincerely,

Patrick F. Roche
President

PFR/cmf

St Joseph's Hospital and Medical Center
703 Main Street · Paterson · New Jersey 07503 · (201)977-2250

Continuing Commitment to Care

Office of the Vice President for Medical Affairs

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
The Hubert H. Humphrey Building
Department of Health and Human Services
200 Independence Avenue S.W.
Washington DC 20201

Re: HCFA Mortality Data for St. Joseph's Hospital and Medical Center (Hospital ID#310019).for 1986

Dear Dr. Roper:

We have received the Mortality Data distributed by the Department of Health and Human Services for the year 1986. We appreciate the opportunity to comment and believe it to be an important and necessary addition to the process previously followed.

While the methodology used in the 1986 study represents a significant improvement over the previous efforts, it still suffers from a serious design flaw. This data is gathered from two sources. Mortalities are identified from the records of the Social Security Administration and presumably are highly accurate. The data on hospitalization and diagnosis are gathered from the computer records of the fiscal intermediary, a record which is designed to provide billing data, not medical data for assessment of quality of care. It is possible and probably sensible to organize patients into the largest grouping feasible for purposes of classification and reimbursement through DRG's. This is done through the ICD-9 coding system, a system perfected in disease classification, but acknowledged to exclude severity of illness. Assignment of an ICD-9 code is based on subjective interpretation of the documentation within the patient's medical record, which would suggest that one ought not to make any significant medical judgments based on these codes. As indicated, and of much greater significance in the current study, is the fact that there is no provision made in the classification system to identify either individuals or groups within a given code assignment (diagnosis) who are more severely ill. For example, the ICD-9 code for occlusive coronary artery disease does not differentiate between single vessel or triple vessel disease. It is not arguable, therefore, that patients within a diagnostic code are even closely grouped with regard to severity. Absent a reliable index for severity or a reliable method to acquire it, mortality statistics based on these codes are not even inferential with regard to quality of care. This fact is not arguable and is probably implicit on a careful analysis of HCFA comments on these studies.

What mortality studies based on these kinds of data can do is serve as a guide for individual hospitals and peer review organizations to critically examine the quality of their efforts in delivering and assessing quality of care. Currently, only by chart review is an index of severity reliably gained, and only through that process of chart review can one make a quality decision with regard to care given.

Although the statistics provided by HCFA for St. Joseph's Hospital and Medical Center are quite favorable, as part of our continuing effort to assess and assure quality of care, we have taken the current data and analyzed each mortality, case by case, and chart by chart. The HCFA data indicated a total of 506 Medicare deaths, 429 occurring within this hospital. Our records indicate a total of 438 patients expired in the hospital. The validity of the assignment of the 68 remaining deaths which occurred after discharge is not fully verifiable. A fair number of these cases represented deaths which occurred in institutions outside of the control of this hospital. Some patients, as is not uncommon in urban populations, were lost to followup to their attending physicians. Therefore, the relationship of the death to the illness cannot be verified.

In the category of pulmonary diseases, the following notations must be made with regard to the mortality group: The average patient age was 81. 43% of those patients were admitted on referral from a long-term care facility. Co-morbid conditions indicated that 21% had malignant disease, 12% were in end-stage renal failure, and 67% had other multiple system disease (cardiovascular, cardiopulmonary, sepsis, dehydration, etc.).

The other category in which St. Joseph's Hospital and Medical Center mortality figures were "outside the predicted range" was in the category of low risk heart disease. It is, firstly, our position that an attempt to group as a category low risk heart disease as compared to severe chronic heart disease is not possible, at least in the current methodology. A test of reliability of this statistical model indicates that the predicted mortality of the two groups is probably the same. Our analysis of mortalities in this supposedly "low risk heart disease group" would support that conclusion. The average age of the patient in the mortality group was 72. 10% of those patients with a mortal outcome were in renal failure. More importantly, 40% of them had had open heart surgery, both revascularization and valve procedures. This, of course, does not suggest that the people included in this group were in fact at "low risk" for their heart disease.

As alluded to previously, within the categories of pulmonary and low risk heart disease, a total of 21 patients expired after discharge from the hospital. 38% of these had been discharged to a long-term care facility.

Another factor to be considered is that the mortality statistics of HCFA are national and, of course, suffer because of the difficulties of comparing care given in the hills of Montana to that in the urban cities of New Jersey. Much more controllable and significant studies are possible on a state by state basis, which, as the saying goes, compare apples to apples. The mortality studies done by the PRO of New Jersey *are in their design a good deal more sophisticated than those of HCFA and indeed more applicable because they are limited to New Jersey hospitals and reflect, therefore, a commonality not present in the HCFA study. For St. Joseph's Hospital and Medical Center, the PRO of New Jersey reports in their much more sophisticated and reliable program a mortality rate for St. Joseph's Hospital and Medical Center in pulmonary disease of 22.1932% in a predicted range of 14.4934% to 27.2402%, well within the predicted range. The same study delivered October 5, 1987 indicates a mortality of 16.8182% in the severe heart disease group at St. Joseph's Hospital and Medical Center and a predicted range of 16.6891% to 22.8982%, once again, well within the predicted range.*

Again, we appreciate the opportunity to comment and trust that our comments will receive appropriate circulation. We will look forward to further refinements in this program in future years.

Sincerely,

John A. Paterson, D.D.S.
Vice President for Medical Affairs

:di

cc: Sr. Jane Frances Brady, President
Ms. C. Fleming
Ms. B. Hopp
Ms. M. Venditte

Office of the President
ST. MARY'S HOSPITAL
135 SOUTH CENTER ST. ORANGE, NEW JERSEY 07050 (201) 266-3000

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Provider Number: 310071

Dear Sir:

Upon receipt of HCFA and PRO of New Jersey data,a committee was convened by Hospital Administration to review these statistical reports as well as the narration. As a result of that review we wish to share the following observations with you:

Parameters of care cannot be established based upon the questionable outcome of a statistical analysis of a small population of septic patients. The methodology did not address severity of illness and did not consider the impact of severely debilitating co-morbid conditions. Our own internal review revealed that the fatal cases were immunocompromised, debilitated elderly patients. In addition, many were terminally ill with advanced cancer.

Such internal review also disclosed the fact that out of eleven patients ten cases were admitted via the Emergency room and three of these were transfers from nursing homes which supports the fact that severity of illness and debilitation due to underlying medical conditions must be considered.

In closing, we would like to state that a statistical analysis of this complexity is certainly a valuable tool in the hands of those capable of understanding and interpreting the true value and significance of these figures i.e., statisticians. However, in light of the conflicting data presented by HFCA when compared to our analysis and the forthcoming N.J. Pro Review of the same information, we are certain that such variances generate grave concern regarding the reliability of this data even by expert statisticians.

The average health consumer assuredly is bound to be even more befuddled and confused by the volume sophistication and, ultimately, contradictions which are surfaced as a result of the processing of these statistics. Speaking, somewhat from the position of the devil's advocate, are the interests of those for whom this study was undertaken really being served by the vast expense which this undertaking has consumed? Is the quality of medical care rendered to everyday citizens significantly, or even remotely, improved by such costly undertakings when our hospitals are already certified by the JCAH and the AHA and the critical issues of competent and quality delivery of medical care are addressed and reviewed by Peer Review Organization and Utilization/Quality Assurance Committees?

Cancer, heart disease, diabetes and, more recently, aids ravage our population and eventually impact in some manner on all of our lives. Funds for research are desperately lacking in all these areas while public education and awareness programs stumble due to inadequate financial support.

Perhaps, the public would be better served and with less public relations fanfare if the economic clout of our government agencies were re-oriented in this fashion rather than a flawed statistical analysis alone.

Sincerely,

Catherine D. Walsh

Catherine D. Walsh
Acting President

CDW/lk

telephone 877-5411
saint michael's
medical center
268 Dr. Martin Luther King Jr. Blvd. - Newark, N.J. 07102

office of the president

October 28, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Doctor Roper:

We appreciate this opportunity to review and respond to your 1986 listing of mortality rates in the sixteen selected diagnostic categories for our Hospital.

Although our Hospital arrived within all of your predicted mortality rate ranges, we feel compelled to comment briefly on the methodology of this report.

Essentially, we believe that mortality statistics can function to some degree as an indicator of quality health care. However, these same statistics should not be misconstrued as the sole component of a quality medical service.

Your statistics, as well as ours, would appear quite different if properly adjusted with the following variables: severity of illness, urban location, service caseloads (ie: cardiac and oncology), indigent ratios and regional referral status. Obviously, all of these variables produce a sicker, more critically ill patient. Additionally, we thought some coding misleading, since many of these patients were readmissions, elderly and with multiple diagnoses.

Finally, as a regional cardiac referral center, we found your definition of low risk heart disease somewhat vague. In fact, our review found many cases in this category to be highly complicated cardiac cases. Perhaps this is an incident specific to our Hospital because of our regional status, however, this should be closely considered.

We believe mortality rate listings should not be the only basis for which to evaluate health care quality since it could prove to be misleading and alarming. As an indicator of health care, it serves poorly as the only retrospective tool. At Saint Michael's, we orchestrate a multi-disciplinary internal quality assurance program coupled with a mortality and morbidity review. As a result, we believe our existing review process fosters a proactive as well as a retrospective look at our health care delivery.

Sincerely,

Esther Coven

Esther Coven
Acting Chief Executive Officer

dw

cc: Sister Margaret J. Straney, R.S.M.
Norah E. McCarthy, RN
William Dauster

ST. PETER'S MEDICAL CENTER
254 Easton Avenue / New Brunswick, New Jersey 08903 / (201) 745-8600

Office of the President

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

St. Peter's Medical Center is a Catholic not-for-profit Medical Center and teaching facility, sponsored by the Diocese of Metuchen and administered by the Sisters of St. Joseph of Peace. We are called to participate in the mission of Jesus by ministering to the sick, poor, afflicted, broken, lonely and frail elderly. Faithful to this ministry, we reach out compassionately to the sick, suffering and grieving as Jesus did, at each state of life and in dying.

The Medical Center is a 420 bed, major teaching affiliate of the Robert Wood Johnson Medical School and has residency programs in primary care, family practice, obstetrics/gynecology, pediatrics, orthopedics, pathology, radiology and anesthesiology. There are also fellowships in cardiology, endocrinology, nephrology, infectious disease, pulmonology, hematology/oncology and neonatology and geriatrics.

To appropriately assess the Medical Center's performance many variables must be examined. Numerous quality indicators, of which mortality is one, are continuously reviewed by our quality assurance program. St. Peter's has long established an ongoing quality assurance program to objectively and systematically monitor and evaluate the quality and appropriateness of patient care, pursue opportunities to improve patient care, and resolve identified problems. The Quality Assurance Committee meets monthly and the scope of its review includes: 1) the ongoing monitoring activities of the Medical/Dental Staff; 2) surgical case reviews; 3) pharmacy and therapeutics functions; 4) medical record review function; 5) blood usage review; 6) antibiotic usage review; and 7) the quality and appropriateness of all patient care services. The Quality Assurance Committee includes the Medical Center's President; a member of the Board of Trustees; President, Medical/Dental Staff; a Clinical Department Chairman; an at-large representative of the Medical/Dental Staff; Vice President, Nursing Services; and is chaired by a member of the Medical/Dental Staff.

Individuals responsible for quality review activities present a written report in person to the Quality Assurance Committee every four months. The Board of Trustees receives reports of Medical Center-wide accountability functions and activities through regular written reports of the Quality Assurance Committee.

The statistical model developed by HCFA offers crude estimates of the expected risk of death as noted by the American Hospital Association. Clearly, the major flaw in the model is that it fails to consider severity of illness and a wide range of factors which have a significant impact on mortality. St. Peter's Medical Center provides both a regional oncology center and a leading diagnostic cardiology service. Thus, the failure to measure comorbidity is a serious limitation of the model. Approximately 50 percent of the total number of mortalities reported by HCFA were patients with a primary diagnosis or comorbidity of cancer.

Within the Metabolic/Electrolyte (ME) Disturbances Diagnostic Category, for example, 62 percent of the mortalities were patients with Do Not Resuscitate (DNR) orders. This percentage is also reflective for all mortalities as 61 percent of the overall total number of mortalities reported by HCFA were patients with DNR orders. All patients within the ME Diagnostic Category had significant comorbidity.

The limitation of HCFA's universe for all diagnostic categories is underlined when compared to the PRO's universe for the same diagnostic categories. HCFA's universe included 2,950 Medicare admissions, while the PRO's universe included 4,484 Medicare admissions. The latter provides a more realistic number as it is reflective of data generated from an additional six months of actual Medicare claims for the year 1986.

HCFA's release of mortality data raises many important questions. Answers concerning the quality of care, however, can only be provided upon review of the patient's medical record. St. Peter's Medical Center continuously strives to assure high-quality patient care by requiring and supporting such detailed review through its Medical Center-wide quality assurance program.

Very truly yours,

Sr Marie de Pazzi

(Sister) Marie de Pazzi, C.S.J.P.
President

:tg

The
Medical Center
OF OCEAN COUNTY
POINT PLEASANT • BRICK

RICHARD J. LEONE, FACHE
PRESIDENT

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The following comments are submitted in response to the release of 1986 Mortality Data for this institution (provider #310052).

> The Medical Center of Ocean County, formerly The Northern Ocean Hospital System, supports in principle the disclosure to the public of quantifiable information regarding the quality of care provided in hospitals, assuming such information is relevant, accurate, verifiable, and consistent. Our first and foremost concern is the provision of quality care and to achieve this the Hospital and Medical Staff commit extensive time and resources to quality assurance activities, including in-depth reviews of hospital mortalities and ongoing review of statistical trends.
>
> In reviewing the HCFA mortality numbers to comment, we are at a disadvantage because the data cannot be verified. There is a discrepancy between HCFA data and Hospital data owing to the fact that HCFA counts only the patient's last admission of the year. In addition, the Hospital is unable to completely verify or assess the causes of the post discharge deaths which occur within 30 days of admission.
>
> It's also difficult to draw conclusions regarding quality from the data since it lacks any adjustment for severity of illness or overall health status. Furthermore, mortality rates for a single year that cover a relatively small statistical sample do not adequately take into account random variations that could produce unusually higher (or lower) rates compared to the predicted ranges.

> The HCFA data are helpful as a screening tool to identify possible quality issues for further study. HCFA has stated that mortality statistics are only one indicator of quality, and certainly this data does not provide a sufficient basis upon which to make a determination about the quality of care in the Hospital. The Medical Center of Ocean County supports and encourages continued efforts by HCFA and others to develop meaningful quality indices that may be used to assess and improve the level of care delivered in hospitals.

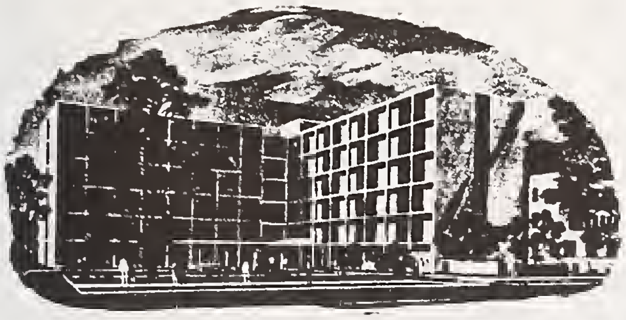
I trust you will find this information helpful and I would be pleased to supply additional commentary at your request.

Yours truly,

Thomas Golden

W. Thomas Golden
Vice President

ds



UNDERWOOD-MEMORIAL HOSPITAL

WOODBURY, NEW JERSEY 08096 • (609) 845-0100

October 27, 1987

William D. Thompson, F.A.C.H.E.
President

William L. Roper, M.D.
Administrator
Health Care Financing Administration
P. O. Box 26684
Baltimore, MD 21207

Hospital Medicare Provider Number: 310081

Dear Dr. Roper:

This is written in response to your letter of September 21, 1987, which outlined the Health Care Financing Administration's (HCFA) plan to publish selected mortality information about all short term acute care hospitals that treated Medicare patients in 1986. Underwood-Memorial Hospital appreciates the opportunity given to respond to the information provided and hopes that review of these comments and the information generated by HCFA will assist the public we serve.

Perhaps the single most important point that should be made is that Underwood-Memorial Hospital believes strongly that death rates alone should not be used to define a particular hospital's level of quality. As well, we feel it important to note that not all factors affecting the probability of death are included in the statistical model used to predict expected death rates. Furthermore, we understand that patients' genetic backgrounds and tendencies for certain types of chronic and terminal illnesses have not been considered in the model.

Of concern to those reviewing the data for New Jersey hospitals should be the fact that New Jersey hospitals treat the second oldest median-age population in the country. The New Jersey Medicare patients' average length of stay is 10.9 days, compared to a national average of 8.8 days. In other words, New Jersey hospitals treat more Medicare patients who stay longer.

Underwood-Memorial Hospital would also like to point out that variations in medical terminology and physician documentation practices may result in misclassification of patients into the 16 diagnostic categories.

Coding conventions or the rules by which a hospital must code its medical records and general inadequacies in the coding system as dictated by the Health Care Financing Administration may affect the validity of the data for each diagnostic category. In addition, those reviewing the mortality data should also understand that the very nature of the medical record coding system is somewhat dependent on individual coder interpretation of medical information and may result in data variations from hospital to hospital.

In reviewing our Hospital's mortality rates produced by you, it appears that Underwood-Memorial exceeds the predicted range in the diagnostic category "Severe Chronic Heart Disease." After conducting a detailed peer review of all patients in this category, we found that in 16 cases (or 27 percent) the patients or their family members requested that resuscitative efforts not be provided by the Hospital should that patient befall cardiac or respiratory arrest. Also, the potential medical record documentation and coding variations as explained in paragraph five of this letter could have impacted 18 of the cases that fell into this category. Significant other disease entities may legitimately have accounted for classification of these patients in different diagnostic categories. Another factor discovered in the peer review process was that this category included 26 patients (or 44 percent) who were 80 years of age or older. This seems to indicate a high proportion of very elderly patients in this category. Finally, it should be pointed out that this category could have patients assigned to it whose cause of death could be unrelated to their last hospital admission but, because they died within 30 days of their last admission, would have been assigned to this category by your model. This factor could skew the data.

Those reviewing this data and any other information pertinent to Underwood-Memorial should be aware of the Hospital's efforts to assure high quality health care. The Quality Assurance Program at Underwood-Memorial Hospital is formally organized as a peer review function and is designed to effectively monitor the quality and appropriateness of patient care rendered throughout the Hospital. Monitoring is performed by the Medical-Dental Staff departments on a monthly basis. The Mortality Review function is conducted on a monthly basis on all deaths, utilizing pre-established criteria. Medical charts are initially screened by a Physician Reviewer, and any case that does not meet the criteria is forwarded to the appropriate Medical Staff department for further review and action. All recommendations, actions, and conclusions are documented and monitored.

In conclusion, we appreciate once again the opportunity of responding to your organization. Hopefully, by carefully reviewing and scrutinizing all information available to us, both the health care consumer and provider will be better educated in their decisions to utilize and deliver quality health services.

Sincerely,

William D. Thompson

William D. Thompson
President

UNITED
HOSPITALS
MEDICAL
CENTER

- Presbyterian Hospital
- Children's Hospital of New Jersey
- Newark Eye and Ear Infirmary
- Eye Institute of New Jersey
- United Hospitals Orthopedic Center

15 SOUTH 9TH STREET, NEWARK, NEW JERSEY 07107 • TELEPHONE: (201) 268-8000

OCTOBER 26, 1987

HOSPITAL #310062

Health Care Finance Administration
Health Standards and Quality Bureau
Hospital Mortality Informtion
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

We have received the HCFA mortality data specific for United Hospitals. Thank you for the opportunity to review and compare our 1986 mortality statistics with the national mortality data.

Upon review of the data, we found that our hospital fell outside of the predicted mortality range in the pulmonary disease category (HCFA range 10 to 25%; hospital rate 26%). In addition, we reviewed mortality data from the peer review organization of New Jersey Inc. According to this data, our hospital had an actual mortality rate of 16.8 in the pulmonary disease category. The PRO predicted range for this category was 12.5 to 23.6 based on 214 admissions.

Our major concern is that the mortality data to be released by HCFA, without a severity of illness adjustment, will not provide the consumer with valid useful information for judging over all hospital performance. Therefore, our in depth review of the mortality records focused on this aspect.

An in depth review of our pulmonary disease mortality patient records was performed by our Utilization Quality Assurance staff. A modified version of the Apache II severity of disease classification system was used to determine severity of illness on admission. The physiologi variables were used as designed in the Apache II instrument. The age and chronic health areas in the tool were modified in order to reflect the population under study.

AGE POINTS

AGE	POINTS
0-64	0
65-75	2
75-84	3
85-94	4
>94	6

CHRONIC HEALTH POINTS

	CATEGORY	POINTS
I.	Defense compromise	3
	Impaired upper airway defense mechanism	
	Impaired lower clearance mechanism	
	Abnormal swallowing mechanism	
II.	Multiple pathology (severe underlying disease)	3

The review findings revealed that the mean age of the patients was 80 years, 70% were admitted from area nursing homes, 90% with compromised defense mechanisms due to prior history of CVA, depressed levels of consciousness, and colonization of the oropharynx by gram negative organisms in patients with a history of feeding tube usage (an area currently under study by us). Of the three post discharge mortalities, two were nursing home returnee's. The third case left against medical advice and returned within ten days with an increased severity of illness and expired within 3 days of re-admission. The average total score on the Apache II was eighteen, according to Wagner and Draper in their article "Acute Physiology and Chronic Health Evaluation and Medicare Reimbursement". We could expect a large majority of the cases to fall in the 0-4 or 5-9 range. Although the Apache II measuring instrument was developed for use for admissions to the Intensive Care Units, we found that with the above modifications, the instrument was suitable for our mortality review.

In summary, professional interpretation of the HCFA data illustrates that the majority of the patients over the predicted mortality range had illnesses characterized with multisystemic problems which exacerbated their level of acuity. Therefore, the standard presentation of our statistical data would be insufficient.

Our research has shown that the quality of care was optimal and the deaths were acceptable as per the severe conditions of the patients. Therefore, the information merely identifies where our hospitals' medicare mortality differs from average mortality. In our case mix the information is no more than an indicator of areas for clinical follow-up and management review.

Therefore, we are requesting that HCFA emphasize that the data are not measures of hospital performance and should not be used by consumers to make inferences of hospital performance and hospital quality. The data is only a screening tool for use in clinical and internal management review.

We appreciate the opportunity to comment on the HCFA proposed data. Please feel free to contact us if you need additional information.

Sincerely,

James R. Cowan, M.D.
President/CEO

UMD
NEW JERSEY
University of Medicine & Dentistry of New Jersey
University Hospital

Office of the Chief Executive Officer
201/456-5658

150 Bergen Street, D-217
Newark, New Jersey 07103-2425

October 23, 1987

William Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314 G
202 Independence Avenue S. W.
Washington, D.C. 20201

Dear Dr. Roper:

Enclosed please find our response to the Medicare Mortality Data.

Should you have any questions, please do not hesitate to contact me or my Associate Administrator for Quality Assessment, Ms. Renia Harris.

Sincerely,

Marc H. Lory
Chief Executive Officer
and Vice President

ML:bk
Enclosure

The University is an affirmative action/equal opportunity employer

UMD
NEW JERSEY
University of Medicine & Dentistry of New Jersey
University Hospital

150 Bergen Street
Newark, New Jersey 07103-2425

Hospital Provider ID-310119

Without detailed information concerning the billing data available to HCFA to compute the predicted mortality rates, it is impossible for University Hospital to verify, for those cases listed in the preliminary release, the accuracy of diagnostic or other data used in the analysis.

The HCFA data was subjected to an extensive review and analysis by Administrative and Medical Staff personnel, through the Hospital's procedures for peer review. Each individual case was screened to verify the following:

1. accuracy of the admission and discharge dates;
2. accuracy of the clinical code; and
3. to the degree possible, to validate the mortality.

The following data discrepancies were noted:

1. One (1) case could not be located on the Hospital's Information System.
2. One (1) case was listed as having died post discharge from the hospital but, the patient died as an in-patient.
3. Three (3) cases had an incorrect discharge date which was also noted to be incorrect on the Hospital bill.
4. One (1) case was listed as Biliary Disease and should have been coded as Cancer of the Pancreas.
5. One (1) case was listed as Tumor Frontal Lobe and should have been Herpes Zoster as the principle diagnosis.
6. One (1) case was listed General Cancer of the Intestine and it should have been Cancer of the Colon.
7. One (1) case was listed as Cardiogenic Shock without Trauma and should have been coded with Rupture.

The University is an affirmative action/equal opportunity employer

8. One (1) case was listed as Congestive Heart Failure and should have been coded as AMI.

No specific problem patterns or trends were identified. The information elicited, however, will be incorporated into ongoing in-service education programs for Staff, as deemed appropriate.

In conclusion, HCFA's data are not measures of Hospital performance. We did not identify any cases in which the actual outcome was unanticipated once all other comorbid conditions were taken into consideration. It should also be noted, due to economic limitations of the urban Medicare population, Hospice and other special services for the terminally ill are not generally available.

THE VALLEY HOSPITAL

Ridgewood • New Jersey • [illegible]

October 28, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Hospital ID Number: 310012

Dear Dr. Roper:

This in response to the data the Health Care Financing Administration (HCFA) sent to Valley Hospital regarding our 1986 Medicare mortality rates. This letter addresses both issues pertaining specifically to Valley's data as well as more general comments regarding the development and presentation of the information.

According to the data on Valley's Medicare patients, there were two cases in which a patient was transferred from Valley Hospital to another acute care institution. As I understand, the mortality rates should reflect those cases that died within 30 days of the last hospital admission and these cases, therefore, should not be included in Valley's rates. These two cases are included on the attached sheet. In addition, in comparing the HCFA data with our own medical record information, a number of discrepancies were found that should be brought to your attention. These included records with a different principle diagnosis than the one reported in the HCFA data and records where the principle procedure was either omitted or incorrect. The corrected information is attached in order for HCFA to update its records and make any necessary changes in Valley's rates. Finally, for a few patients, the date of admission reflected in the data was not the last admission to Valley Hospital for that patient. Again, this information is included so that HCFA can update its database.

In general, the data presented to the hospital was fairly accurate in reflecting those Medicare cases that were admitted to Valley Hospital in 1986. In the future however, HCFA should attempt to

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

present the data in a way that is easier for hospitals to verify and understand. As a recommendation for future releases, data forwarded to hospitals should:

1. Include patient medical record number, full last name and diagnostic related group (DRG) in order to make retrieval and verification of the data easier.

2. Consider the patient's admission status (i.e., if a hospital admits a large number of patients admitted from a skilled nursing facility, etc.) which may impact the death rate of an institution.

3. Clarify the all other category (at least the inclusion of admitting DRG). A separate mortality rate was not presented for this category although it was quite large.

4. Include a severity of illness adjustment. Consideration should be given to grouping similar hospitals (i.e., cardiac surgery programs, etc.) for rate derivation.

5. Include a better description of the calculation of the mortality rates including a clear definition of the derivation of the numerator and denominator utilized. In New Jersey, there was discrepancy between the denominator used by the PRO and that used by HCFA.

In closing, it is important for HCFA to realize that mortality rate information is just one component of quality assurance. It must be stressed that mortality rates are, in fact, only one tool utilized by a hospital to ensure rather than to measure quality.

Thank you for the opportunity to comment on this release. It is important that with an issue as volatile as death rates that hospitals are given the opportunity to have input into the process as well as the opportunity to comment upon HCFA's reports.

If you require any further clarification, please contact me at (201) 447-8002.

Sincerely,

Michael W.

Michael W. Azzara
President

MWA/amh
Enclosures

CASES DISCHARGED TO ANOTHER ACUTE CARE FACILITY

[redacted]	HS	073	12/23/86	12/24/86	01/02/87
[redacted]	HM	073	02/05/86	02/15/86	03/05/86

WARREN HOSPITAL

185 Roseberry Street, Phillipsburg, New Jersey 08865
Telephone (201) 859-6700

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D. C. 20201

Dear Dr. Roper:

We appreciate the opportunity to comment on the Hospital Mortality Data for our hospital recently published by the Health Care Financing Administration. We have shared the data with the members of our Medical Staff and Board of Trustees, as well as other hospital staff.

We share the concerns you expressed in your letter of September 21, 1987 when you released the information to each hospital. We, too, believe that the statistical data can be helpful to our physician staff and individual consumers provided they heed your caution that the information on its own is not a complete measure of quality of care of any individual institution because the statistical measures used do not deal with the complex issue of severity of illness. In addition, we would point out that, in our community, certain traditions relative to the use of the hospital for aged patients appears to have an effect on mortality statistics in our particular case.

In New Jersey, in addition to the statistics published by your organization, each hospital received mortality statistics from the statewide peer review organization, a group whose primary concern is tomonitor utilization and quality in all New Jersey hospitals. Unfortunately, a comparison of both sets of data reveals considerable variations between the two, an obvious result of the use of different methodologies. We are concerned that the publication of two sets of varying data may serve to confuse the public.

The Medical Staff of Warren Hospital has in place an extensive quality assurance program. Part of the program involves a review of all deaths occurring within the hospital. In those cases not meeting certain predetermined criteria, a detailed review is conducted by a Medical Staff committee with the treating physician present to answer questions the committee members may have. Such reviews serve as both an educational experience and a forum to take any necessary corrective action. We have found the process to be effective.

Our hospital and Medical Staff are committed to provide the best medical care possible. To the extent that the publication of the 1986 mortality statistics will assist our institution to maintain a high level of performance we are appreciative of the opportunity to make these brief comments.

Very truly yours,

John A. DeMarrais
Administrator

JAD:al

WAYNE
GENERAL
HOSPITAL

COMMENTS CONCERNING
1986 MEDICARE MORTALITY DATA

HOSPITAL #310116

October 26, 1987

Wayne General Hospital is supportive of this initial effort on the part of the Health Care Financing Administration (HCFA) to quantify the high quality of health care in our nation's hospitals. However, hospitals are very complex organizations and one cannot expect that a single parameter, such as mortality data, can accurately measure differences among hospitals. Much more effort must be devoted to developing valid measurement systems. The reader is urged to pay close attention over the next several years to the quality measurement programs under development by the Joint Commission on the Accreditation of Healthcare Organizations.

The statistical model developed by HCFA fails to take into consideration a number of factors which effect the probability of death. The model does not consider how sick the patient is, it does not consider whether this death was expected as a normal part of the disease process. The model does not even distinguish among causes of death unrelated to the hospitalization, such as traffic accidents. It is our opinion that mortality data alone, especially employing such an unrefined approach, is an inadequate yardstick.

** Our mortality rates are within the expected ranges on all parameters; both overall as well as in each individual category.

** The HCFA model overstates actual mortality rates, because it only counts the patient's last admission. Specifically, HCFA reports 291 deaths out of 1,964 admissions. In fact 3,370 Medicare patients were admitted in 1986. Calculating the mortality on this basis give us a mortality rate of 8.6% not 15% as reported in the HCFA model.

** It is important to note that the statistical test is only capable of determining if hospital falls within or outside the expected range. Although precise numbers are presented by HCFA, it is inappropriate to reach conclusions based upon these numbers. The statistical model produces a range of expected values, in this case a percentage, and any value within that range is equal to any other value in the range. To draw an analogy, it is like the difference between a Pass/Fail grading system in school and a system based upon numerical grades i.e. 95. The HCFA model only tells you if you passed or failed, it cannot tell you if you received a

224 Hamburg Turnpike Wayne, New Jersey 07470 201/942-6900

95 or an 85. Evan though numerical values are reported in the data release, their only importance is to determine if you failed or passed. Numerical grades cannot be compared in a Pass/Fail system only passing or failing.

** The Medicare patients who died were quite elderly. The average age at time of death was 79.9 years. The mode, or the age at which the largest number of patients died, was 86. The midpoint of the ages was 81 which means that half the patients who died were 81 or older.

** Of the 291 deaths, 46 occurred outside the Hospital. Since we do not have access to the HCFA data on deaths outside the hospital, we cannot verify that all of these patients have in fact died. Of those which we have independently verified, 28% had errors in the reported date of death. We believe these errors could flaw the calculations of predicted mortality ranges.

Wayne General Hospital operates an extensive quality assurance program. The goal of this program is to identify potential patient care concerns and solve them before they negatively effect the care of patients. As a part of this process, patient care departments in the Hospital monitor the quality oftheir work on an on-going basis. Every in-hospital death is reviewed. Any death which is unexpected is thoroughly reviewed and discussed fully by the appropriate medical department. This on-going mortality review is only a small part of the overall quality assurance program at Wayne General Hospital.

Inquiries regarding the HCFA mortality data or statements made in this commentary may be directed to Richard Jones
(201) 956-3305.

WEST
HUDSON
HOSPITAL 206 BERGEN AVENUE • KEARNY, NJ 07032 • (201) 955-7000

ROBERT F. MAGULLIAN
Chairman
Board of Governors

FRANK P. SMILARI
Chief Executive Officer

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Hospital ID # 310042

Dear Sirs:

Enclosed is the corrected list of cases listed for West Hudson Hospital in your mortality statistics.

The date of death was in error for 17 cases. The date of admission was in error for 1 patient. There was one patient listed who did not expire and is still being treated on an outpatient basis at the hospital.

Very truly yours,
Harriette Hart
Harriette Hart
Asssitant Administrator
Health Information Services

Enc.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

West Jersey Health System

October 26, 1987

William L. Roper, M.D.
Administrator, Health Care
Financing Administration
Washington, D.C. 20201

RE: Medicare Provider #310022

Dear Dr. Roper:

We appreciate the opportunity to comment on the information regarding mortality rates of Medicare patients admitted to our four hospitals.

We have reviewed and attempted to validate the information you provided within the limited (thirty) 30 day time frame and have some reservations regarding the accuracy of the numbers. Based on this review we think you and any members of the public who scrutinize this information will be interested in the following comments:

1. After evaluating the information provided by HCFA, we noticed that not all of our 1986 Medicare admissions are included in this analysis. Patients who were admitted more than once do not account for all of the difference. The Peer Review Organization of New Jersey (PRO) has also indicated that their information also reflects a higher number of patients. Therefore, we caution the Federal Government and any organization or individual from drawing conclusions about data that may only include 63% of our actual Medicare admissions.

2. Further validation of the specific information provided also revealed that 13% of the cases identified with different discharge and death dates were incorrectly reported. This indicates problems with the methods used by HCFA to combine Social Security information with Medicare billing information.

We request that any information released to the public include the discrepancies noted above and the following general comments:

1. It is vitally important for the public to understand the limitations of this type of information. We caution that the "ranges" provided by HCFA are derived from a very complex statistical model. These predicted rates are not averages or norms derived from actual information but are based on narrowly defined complicated statistical methods.

2. As you have already acknowledged, the HCFA model does not take into account the many factors that contribute to the probability of death which are difficult to measure and control, for example: genetic background, lifestyle choices, and the severity of a patient's illness.

West Jersey Health System
Corporate Offices
Mt. Ephraim & Atlantic Avenues
Camden, NJ 08104
(609) 342-4600

West Jersey Hospital
Northern Division
Mt. Ephraim & Atlantic Avenues
Camden, NJ 08104
(609) 342-4000

West Jersey Hospital
Southern Division
Berlin, NJ 08009
(609) 768-6000

West Jersey Hospital
Eastern Division
Voorhees, NJ 08043
(609) 772-5000

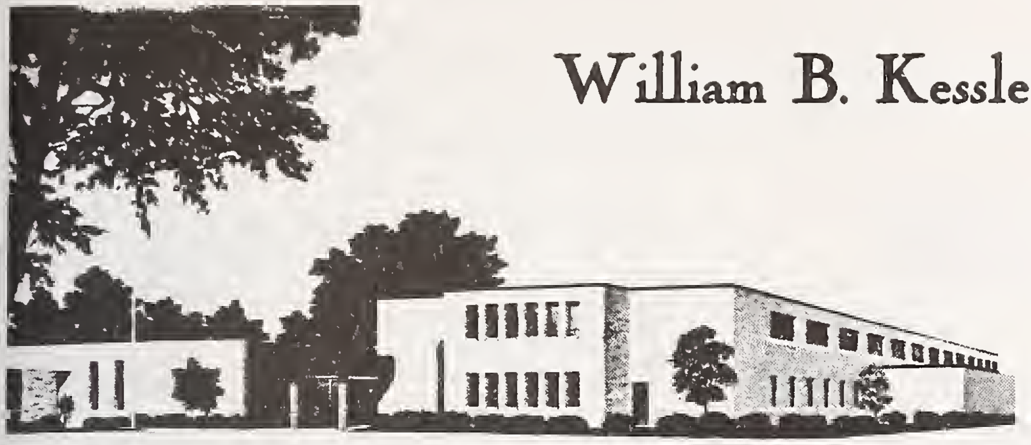
Garden State
Community Hospital
Marlton, NJ 08053
(609) 596-3500

Death rates alone cannot be used to measure quality of care provided in hospitals. The primary use of these statistics should be as a trigger to focus review efforts and futher refine quality assurance and physician review activities. The West Jersey Health System will, after careful analysis, incorporate this information into our existing ongoing Quality Assurance Program which includes review of every death occuring in the hospital.

Sincerely,

Barry D. Brown, President

BDB/SER/yhd



William B. Kessler Memorial Hospital

WHITE HORSE PIKE AT CENTRAL
HAMMONTON, N.J. 08037
609 • 561-6700

ACCREDITED BY THE
JOINT COMMISSION
ON
ACCREDITATION OF HOSPITALS

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Program
Hospital Mortality Information
6300 Security Boulevard
Room 2D2
Meadows East Building
Baltimore, Maryland 21207

MEDICARE PROVIDER#:310088

Dear Dr. Roper:

Thank you for the opportunity to comment on the mortality information to be released by HFCA in December, 1987. This information has been reviewed and appears to be accurate.

Many, more qualified than myself, have commented on the HCFA model for determining expected mortality rates - its greatest deficiency being failure to account for severity of patient conditions. An examination of WBKMH's '86 Medicare patient deaths supports this contention. Of a total of 125 Medicare patients who died within 30 days of admission, the condition of 85 of these patients was so grave death was imminent.

Again, thank you for the opportunity to make these comments.

Sincerely,

Warren E. Gager

Warren E. Gager
Chief Executive Officer

WEG/dam

ZURBRUGG
MEMORIAL
HOSPITALS

Rancocas Valley Division
Riverside Division

Riverside Division
Hospital Plaza
Riverside, NJ 08075
(609) 461-6700

October 27, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration (HCFA)
Washington, DC 20201

RE: Medicare Provider #310056
Riverside Division

Dear Dr. Roper:

Zurbrugg Memorial Hospitals (ZMH) welcome the opportunity to review and comment on the selected mortality information you released in September of this year. This clearly is an issue of vital importance to all hospitals and to the public at large. We would like to make the following points:

1. As shown in your report, the mortality rates at ZMH (Riverside Division) fall within the expected ranges for every diagnosis you selected. Our Quality Assurance Committee has validated that your data is an adequate reflection of the statistics at our facilities based upon the statistical model you have used. ZMH is within the anticipated range consistent with the critically ill nature of the patients requiring specialty care at this institution.

2. ZMH has a hospital wide quality assurance program which reviews all aspects of patient care, including the medical staff, nursing care and all other ancillary services. Mortality data is very important to quality assurance and is used to identify potential areas for evaluation, but mortality data alone cannot be used as an indicator of quality of care given by a hospital. It is only one of the outcomes that we use in evaluating care.

3. There are admitted problems with the statistical model that HCFA has used in measuring mortality data. This may lead to a misrepresentation of the cause of death by the public. For instance, no severity of illness factor has been included in the model. While we recognize the need to include a set number of days for mortality reporting, this information can skew the rate. It is essential that the public recognizes that the cause of death may not be directly related to the patient's hospitalization since there may be other causes which are beyond the hospital's control. It is imperative that the model be further refined to address these issues.

Nevertheless, despite these problems with the methodology, we welcome the attempt by HCFA to draw attention to the issues of quality assurance in our hospitals, and we hope the release of this data will be helpful and not confuse the public and the media in understanding this very complex matter.

Sincerely,

Bernadette M. Mangan

Bernadette M. Mangan
Vice President for
Professional Services

BMM:kl

ZURBRUGG
MEMORIAL
HOSPITALS

Rancocas Valley Division
Riverside Division

Riverside Division
Hospital Plaza
Riverside, NJ 08075
(609) 461-6700

October 27, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration (HCFA)
Washington, DC 20201

RE: Medicare Provider #310061
Rancocas Valley Division

Dear Dr. Roper:

Zurbrugg Memorial Hospitals (ZMH) welcome the opportunity to review and comment on the selected mortality information you released in September of this year. This clearly is an issue of vital importance to all hospitals and to the public at large. We would like to make the following points:

1. As shown in your report, the mortality rates at ZMH (Rancocas Valley Division) fall within the expected ranges for every diagnosis you selected. Our Quality Assurance Committee has validated that your data is an adequate reflection of the statistics at our facilities based upon the statistical model you have used. ZMH is within the anticipated range consistent with the critically ill nature of the patients requiring specialty care at this institution.

2. ZMH has a hospital wide quality assurance program which reviews all aspects of patient care, including the medical staff, nursing care and all other ancillary services. Mortality data is very important to quality assurance and is used to identify potential areas for evaluation, but mortality data alone cannot be used as an indicator of quality of care given by a hospital. It is only one of the outcomes that we use in evaluating care.

3. There are admitted problems with the statistical model that HCFA has used in measuring mortality data. This may lead to a misrepresentation of the cause of death by the public. For instance, no severity of illness factor has been included in the model. While we recognize the need to include a set number of days for mortality reporting, this information can skew the rate. It is essential that the public recognizes that the cause of death may not be directly related to the patient's hospitalization since there may be other causes which are beyond the hospital's control. It is imperative that the model be further refined to address these issues.

Nevertheless, despite these problems with the methodology, we welcome the attempt by HCFA to draw attention to the issues of quality assurance in our hospitals, and we hope the release of this data will be helpful and not confuse the public and the media in understanding this very complex matter.

Sincerely,

Bernadette M. Mangan

Bernadette M. Mangan
Vice President for
Professional Services

BMM:kl

New Mexico

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ACOMA CANDNCITD LAQUNA PHS SAN FIDEL NM 87049	NM-5 *	23	17	5-37	.	.		.	.		.	.		.	.		1	100	1-97	1	100	0-97	5	20	7-76
ARTESIA GEN HOSP ARTESIA NM 88210	NM-6	277	14	9-19	15	67	12-57	10	30	10-63	7	0	3-62	15	13	10-53	8	38	13-73	8	0	1-56	40	23	8-33
CIBOLA GEN HDSP GRANTS NM 87020	NM-7 *	195	17	8-19	11	36	11-63	9	33	10-66	6	50	2-63	9	11	4-55	4	75	8-83	5	40	3-71	29	21	7-36
CLOVIS HIGH PLAINS HDSP CLOVIS NM 88101	NM-8 *	1125	13	10-17	73	29	17-40	35	29	17-47	11	9	4-51	67	27	12-33	40	50	26-56	46	15	6-31	174	18	14-29
CUBA HOSPITAL CUBA NM 87013	NM-9 *	13	15	1-40	1	100	0-99	.	.		1	0	0-98	.	.		.	.		1	100	0-99	1	0	0-98
CUBA HOSPITAL CUBA NM 87013	NM-10	14	7	3-42	.	.		.	.		2	0	0-93	3	0	2-81	.	.		.	.		2	0	1-89
DE BACA HOSP FORT SUMNER NM 88119	NM-11 *	129	13	8-21	7	57	12-75	5	40	6-75	7	29	3-62	6	0	3-65	4	50	9-85	1	0	0-98	15	7	7-49
DR DAN C TRIGG MEMORIAL HO TUCUMCARI NM 88401	NM-12 *	205	16	10-21	7	57	12-74	10	40	12-66	7	14	4-62	13	38	8-54	4	25	6-80	9	0	3-55	33	21	12-41
EASTERN N M MEDICAL CENTER ROSWELL NM 88201	NM-13	857	11	7-14	43	19	10-36	20	30	12-51	24	21	8-41	24	17	11-45	28	61	22-57	21	14	7-43	95	20	10-28
ESPANDLA HOSP ESPANDLA NM 87532	NM-14 *	559	9	9-18	21	29	12-51	15	33	14-59	12	8	4-50	24	13	9-42	6	50	12-79	23	4	3-36	99	14	16-34
GALLUP INDIAN MEDICAL CENT GALLUP NM 87301	NM-15	331	8	6-14	10	30	8-60	9	0	5-57	7	29	5-65	7	0	4-62	7	43	14-77	2	50	0-94	23	13	8-42
GERALD CHAMPION HOSP ALAMOGORDO NM 88310	NM-16 *	762	14	9-16	35	20	13-44	33	64	16-47	17	35	5-43	44	14	11-36	37	35	21-52	15	27	7-50	88	13	11-29
GILA REGIONAL MEDICAL CTR SILVER CITY NM 88061	NM-17 *	723	12	9-16	51	33	15-42	17	29	12-53	18	11	7-46	44	9	12-37	23	17	21-60	21	29	7-44	91	22	12-30
GUADALUPE GENERAL HOSP SANTA RDSA NM 88435	NM-18 *	111	7	5-18	.	.		2	0	1-89	1	0	0-99	4	25	3-75	2	100	6-95	2	0	0-93	18	17	7-45
GUADALUPE MEDICAL CTR CARLSBAD NM 88220	NM-19 *	1224	11	8-15	79	23	16-38	35	51	18-48	26	12	11-44	52	15	13-36	31	19	21-55	22	5	7-43	147	18	12-27
HEIGHTS GENERAL HDSPITAL ALBUQUERQUE NM 87109	NM-20 *	610	13	7-15	27	26	9-42	16	50	11-54	19	16	5-40	30	13	10-40	17	35	19-63	23	17	6-39	72	24	10-29
HDLY CROSS HOSPITAL TAOS NM 87571	NM-21	427	8	7-16	7	43	15-79	16	38	12-55	16	19	4-42	27	11	11-44	12	42	16-67	8	13	1-56	48	13	10-34
JAL COMMUNITY HOSP JAL NM 88252	NM-22 *	13	8	2-41	.	.		.	.		.	.		.	.		1	100	1-97	.	.		3	0	1-81
KASEMAN PRESBYTERIAN HDSPI ALBUQUERQUE NM 87106	NM-23 *	1696	10	7-14	82	20	11-32	53	28	18-43	57	16	9-32	63	13	14-36	48	38	27-55	38	16	7-34	195	17	13-26
LAS VAGES MEDICAL CENTER LAS VEGAS NM 87701	NM-24 *	39	21	6-30	.	.		.	.		1	0	0-97	2	50	2-90	1	0	0-97	2	0	1-89	18	28	6-43
LEA REGIONAL HOSPITAL HDBBS NM 88240	NM-25 *	921	11	9-16	53	26	17-43	32	28	18-50	23	17	9-44	45	18	11-36	29	38	22-57	24	17	7-41	123	17	12-28
LDS ALAMOS MEDICAL CENTER LDS ALAMOS NM 87544	NM-26 *	320	6	7-16	13	31	8-54	5	40	4-72	10	20	5-55	9	11	6-60	10	10	12-66	9	22	2-53	37	8	7-33
LDVELACE MEDICAL CENTER IN ALBUQUERQUE NM 87108	NM-27 *	978	8	7-14	73	21	17-40	29	24	15-48	21	10	4-37	24	13	8-40	33	15	19-52	19	11	5-42	82	12	11-30
MEMDRIAL GENERAL HOSP LAS CRUCES NM 88001	NM-28	2251	10	7-14	149	14	14-32	58	28	18-42	53	17	9-32	90	20	15-34	53	45	26-53	42	12	9-36	198	19	12-26
MIMBRES MEM HDSP DEMING NM 88030	NM-29 *	461	19	10-19	20	75	10-49	25	52	16-51	12	25	6-53	28	18	10-40	26	35	22-58	23	13	5-39	76	20	12-32
MINERS COLFAX MEDICAL CENT RATDN NM 87740	NM-30	237	12	6-16	15	53	11-55	5	40	4-72	9	0	2-52	12	25	8-55	5	40	9-78	5	0	1-68	17	24	6-44

*Written Comments Not Submitted

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ACOMA CANONCITO LAQUNA PHS SAN FIOEL NM 87049	1	0	1-97	1	0	1-97	.	.		.	.		1	0	0-100	.	.			.		2	0	0-100	.	.	
ARTESIA GEN HOSP ARTESIA NM 88210	7	14	2-63	2	0	2-90	7	0	1-57	.	.		36	3	1-20	.	.		.	.		19	5	1-30	12	0	0-46
CIBOLA GEN HOSP GRANTS NM 87020	3	100	6-88	5	20	6-75	2	0	0-91	1	0	0-100	38	0	1-19	5	20	0-75	1	0	0-100	11	0	0-45	4	0	0-100
CLOVIS HIGH PLAINS HOSP CLOVIS NM 88101	17	35	6-50	19	21	17-60	35	11	4-27	7	0	0-100	117	3	2-11	66	2	1-15	2	0	0-100	64	2	1-13	82	1	0-9
CUBA HOSPITAL CUBA NM 87013	1	0	0-98	.	.		.			.	.		3	0	0-95	.	.		.	.		1	0	0-100		.	
CUBA HOSPITAL CUBA NM 87013	.	.		.	.		.	.		.	.		3	0	0-98	1	0	0-99	.	.		.	.		1	0	0-100
OE BACA HOSP FORT SUMNER NM 88119	1	100	1-98	1	0	0-97	2	0	0-93	.	.		21	0	1-28	2	0	0-100	1	0	0-100	6	0	0-78	6	0	0-91
OR OAN C TRIGG MEMORIAL HO TUCUMCARI NM 88401	3	0	4-85	2	50	5-93	.	.		.	.		16	13	0-34	9	11	0-51	.	.		18	0	1-31	8	0	0-86
EASTERN N M MEOICAL CENTER ROSWELL NM 88201	10	0	1-55	12	25	11-62	29	10	4-29	5	0	0-100	97	3	1-11	54	2	0-17	15	0	0-99	56	5	1-14	72	1	0-12
ESPANOLA HOSP ESPANOLA NM 87532	15	33	12-60	7	29	11-74	6	17	1-62	7	0	0-100	77	4	3-16	38	0	1-20	1	0	0-100	27	7	1-23	26	0	0-33
GALLUP INOIAN MEOICAL CENT GALLUP NM 87301	2	0	2-91	6	33	9-75	24	4	3-31	65	0	0-23	44	5	2-19	37	0	1-20	3	0	0-100	8	0	0-63	13	0	0-87
GERALD CHAMPION HOSP ALAMOGORDO NM 88310	7	14	5-67	15	27	12-57	20	10	2-32	4	0	0-100	92	5	2-12	48	2	1-17	3	0	0-100	42	5	1-16	44	0	0-16
GILA REGIONAL MEOICAL CTR SILVER CITY NM 88061	6	33	3-68	1	100	1-98	28	11	4-30	21	0	0-68	92	4	2-13	38	5	0-25	4	0	0-100	40	5	1-17	28	11	0-24
GUAOALUPE GENERAL HOSP SANTA ROSA NM 88435	3	0	0-84	1	100	1-97	.	.		.	.		17	6	1-32	3	0	0-100	1	0	0-100	9	0	0-59	1	0	0-100
GUAOALUPE MEOICAL CTR CARLSBAO NM 88220	11	18	7-59	8	38	8-66	45	16	3-23	1	0	0-100	187	3	2-10	66	6	1-15	13	0	0-98	103	4	2-11	62	2	0-11
HEIGHTS GENERAL HOSPITAL ALBUQUERQUE NM 87109	11	64	9-63	9	44	9-66	29	3	1-24	.	.		62	3	1-14	36	6	1-21	8	0	0-100	30	7	0-21	59	5	0-16
HOLY CROSS HOSPITAL TAOS NM 87571	1	100	0-98	6	17	9-74	12	0	1-42	3	0	0-100	66	2	1-13	5	0	0-69	8	0	0-99	47	2	1-15	26	0	0-33
JAL COMMUNITY HOSP JAL NM 88252	.	.		.	.		.	.		.	.		1	0	0-100	1	0	0-97	.	.		2	0	0-100	.	.	
KASEMAN PRESBYTERIAN HOSPI ALBUQUERQUE NM 87106	12	17	3-52	20	30	16-58	56	9	3-20	14	0	0-77	160	6	2-10	84	6	1-13	10	0	0-100	76	5	2-13	178	1	0-5
LAS VAGES MEOICAL CENTER LAS VEGAS NM 87701		.		2	50	3-91	.	.		.	.		1	0	0-100	.	.		.	.		2	0	0-99	.	.	
LEA REGIONAL HOSPITAL HOBBS NM 88240	9	22	4-60	7	29	9-71	33	9	2-24	1	0	0-100	102	5	2-12	39	0	1-20	10	0	0-97	51	10	2-17	61	0	0-11
LOS ALAMOS MEOICAL CENTER LOS ALAMOS NM 87544	4	0	1-76	8	13	12-72	14	14	1-38	2	0	0-99	31	0	1-22	19	0	1-31	5	0	0-100	22	0	1-26	22	0	0-31
LOVELACE MEOICAL CENTER IN ALBUQUERQUE NM 87108	14	14	4-51	9	56	14-71	30	7	2-26	15	0	0-95	79	4	1-12	56	7	1-16	10	0	0-98	91	0	2-12	93	2	0-8
MEMORIAL GENERAL HOSP LAS CRUCES NM 88001	17	24	8-52	26	46	16-54	73	14	4-18	19	0	0-94	259	5	3-10	142	4	1-11	24	0	0-84	122	4	2-10	183	1	0-5
MIMBRES MEM HOSP OEMING NM 88030	4	100	5-80	2	0	1-89	2	0	0-97	.	.		57	7	1-15	5	0	1-67	1	0	0-100	42	19	1-17	15	0	0-61
MINERS COLFAX MEOICAL CENT RATON NM 87740	4	50	4-79	1	100	2-98	4	0	0-83	.	.		54	2	1-14	10	0	0-52	1	0	0-100	6	0	0-77	12	17	0-47

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall			High Risk Diagnostic Categories Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MINERS' CDLFAX MEDICAL CEN RATDN NM 87740	NM-31	123	11	8-22	9	44	7-62	2	0	1-89	5	20	2-69	3	0	1-81	4	50	15-91	3	0	6-87	21	14	9-45
NOR-LEA GENERAL HDSPITAL LOVINGTDN NM 88260	NM-32 *	94	18	7-21	9	56	7-62	2	50	2-90	4	0	1-75	1	100	0-97	7	71	13-76	4	25	1-75	9	33	4-55
NORTHEASTERN REGIONAL HDSP LAS VEGAS NM 87701	NM-33 *	567	13	11-20	22	41	19-58	16	31	10-52	14	7	7-50	36	14	12-40	24	50	22-61	11	9	5-53	116	15	14-31
NORTHSIDE PRESBYTERIAN HDS ALBUQUERQUE NM 87109	NM-34 *	327	11	6-15	21	33	9-46	4	0	2-74	13	15	5-48	7	29	5-63	9	22	12-68	7	14	1-60	35	14	7-33
PHS INDIAN HDSP MESCALERO NM 88340	NM-35 *	6	17	2-63	.	.		.	.		.	.		.	.		.	.		.	.		1	100	2-98
PHS INDIAN HOSP SANTA FE NM 87501	NM-36 *	105	7	6-20	2	50	0-90	3	33	4-84	4	25	2-74	4	25	4-78	.	.		6	0	1-64	15	0	11-55
PHS INDIAN HOSPITAL ALBUQUERQUE NM 87106	NM-37 *	72	4	4-20	3	0	4-85	.	.		2	0	0-95	4	25	2-75	.	.		2	0	0-90	9	11	4-55
PHS INDIAN HOSPITAL CROWNPDINT NM 87313	NM-38 *	54	9	6-26	1	100	1-97	.	.		2	100	2-90	1	0	0-98	2	0	6-94	.	.		14	14	6-48
PHS INDIAN HDSPITAL SHIPROCK NM 87420	NM-39 *	176	14	8-19	9	78	11-68	5	0	3-70	2	0	0-90	6	0	4-66	3	0	7-88	6	0	1-63	36	19	10-37
PRESBYTERIAN HOSP CENTER ALBUQUERQUE NM 87102	NM-40 *	3591	9	8-14	220	17	13-29	77	27	18-39	81	21	9-29	160	17	16-30	227	21	29-44	51	27	8-33	241	19	13-26
REHOBOTH MC KINLEY CHRISTI GALLUP NM 87301	NM-41 *	392	14	9-18	11	27	9-59	10	70	8-60	8	13	3-57	27	15	10-41	15	47	20-66	10	20	6-58	69	19	12-32
ROOSEVELT GENERAL HDSPITAL PORTALES NM 88130	NM-42	305	13	7-17	12	58	16-68	1	0	0-97	4	25	0-78	17	29	10-50	11	36	13-65	4	25	0-76	53	15	7-29
RUIDDSD HDNDO VALLEY GEN H RUIDDSD NM 88345	NM-43 *	310	11	6-15	6	17	2-63	9	33	9-63	6	0	1-63	15	13	8-51	13	62	17-66	7	14	2-59	32	28	7-35
SAN JUAN REGIONAL MED CTR FARMINGTON NM 87401	NM-44	858	15	8-15	33	27	10-41	31	39	15-47	28	25	7-38	24	46	12-46	28	57	23-59	33	18	6-36	126	26	12-27
SIERRA VISTA HDSPITAL TRUTH DR CDNSEQUENCES NM 87901	NM-45 *	437	15	9-18	5	40	11-82	10	60	9-61	18	28	4-40	18	28	9-48	27	52	23-59	10	30	4-53	77	18	10-29
SOCDRRO GENERAL HOSPITAL SDCDRRO NM 87801	NM-46	222	12	7-17	11	64	6-56	4	50	4-78	4	50	1-74	10	30	7-58	1	0	1-97	18	11	5-43	44	16	10-36
ST JOSEPH WEST MESA HDSPIT ALBUQUERQUE NM 87114	NM-47	332	13	8-17	18	0	6-44	13	46	9-54	14	0	4-45	13	15	7-51	13	23	16-65	9	22	6-59	35	31	9-37
ST JOSEPHS HDSP ALBUQUERQUE NM 87102	NM-48	2089	10	7-14	198	24	15-32	51	39	18-43	54	22	8-30	48	13	14-38	34	50	26-59	36	8	6-34	136	15	12-28
ST MARYS HOSP ROSWELL NM 88201	NM-49 *	958	11	7-14	72	26	15-38	30	27	12-43	24	13	6-39	35	9	11-38	24	42	22-60	27	19	7-39	68	25	10-30
ST VINCENT HDSP SANTA FE NM 87501	NM-50	1792	9	7-14	130	22	15-33	49	31	16-41	47	23	10-35	62	6	12-33	49	37	29-57	29	7	4-33	148	19	13-28
UNIDN CO GENERAL HDSP CLAYTON NM 88415	NM-51 *	180	13	8-19	3	67	2-82	4	25	3-76	5	20	2-68	6	0	3-64	6	33	9-75	12	17	4-49	24	17	7-40
UNIV OF NM HDSP BCMC ALBUQUERQUE NM 87106	NM-52	1083	11	7-14	68	29	14-37	25	16	13-47	31	10	7-36	27	15	8-39	18	39	15-57	28	36	5-36	107	24	13-30
VALENCIA PRESBYTERIAN HDSP BELEN NM 87002	NM-53	288	8	7-17	10	30	4-54	4	50	4-77	6	0	2-64	15	7	7-48	5	80	13-84	16	13	6-47	43	12	11-36
ZUNI PHS INDIAN HDSPITAL ZUNI NM 87327	NM-54 *	51	4	6-26	.	.		2	0	2-90	.	.		4	0	2-74	.	.		.	.		8	13	5-61

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MINERS' COLFAX MEDICAL CEN RATON NM 87740	1	0	0-99	3	33	3-83	1	0	0-100	4	0	0-100	17	6	0-33	2	0	0-100	3	0	0-97	8	0	0-60	3	0	0-100
NOR-LEA GENERAL HOSPITAL LOVINGTON NM 88260	1	0	0-98	.	.		1	100	0-98	.	.		14	0	0-39	7	0	0-81	4	0	0-100	2	0	0-99	2	0	0-100
NORTHEASTERN REGIONAL HOSP LAS VEGAS NM 87701	8	25	7-67	7	14	7-68	20	20	2-32	3	0	0-100	73	5	3-16	6	0	3-65	2	0	0-100	44	7	1-17	13	0	0-44
NORTHSIDE PRESBYTERIAN HOS ALBUQUERQUE NM 87109	2	0	0-91	1	100	1-97	16	6	1-35	.	.		26	8	2-27	16	0	0-42	4	0	0-100	31	0	1-21	21	10	0-35
PHS INDIAN HOSP MESCALERO NM 88340	.	.		.	.		.			.	.		.	.		.	.		.	.		.	.		.	.	
PHS INDIAN HOSP SANTA FE NM 87501	2	0	0-91	1	0	0-97	.	.		1	0	0-100	22	0	1-28	12	0	0-58	1	0	0-100	1	0	0-100	2	0	0-100
PHS INDIAN HOSPITAL ALBUQUERQUE NM 87106	.	.		1	0	1-97	1	0	0-97	.	.		7	0	0-62	5	0	0-69	.	.		2	0	0-99	3	0	0-100
PHS INDIAN HOSPITAL CROWNPOINT NM 87313	1	0	0-99	.	.			.		.			5	0	0-74	5	0	0-68	.	.		1	0	0-100	.	.	
PHS INDIAN HOSPITAL SHIPROCK NM 87420	9	11	3-58	3	0	1-81	1	0	0-99	.	.		10	20	0-47	8	13	0-63	2	0	0-100	9	22	0-52	4	0	0-100
PRESBYTERIAN HOSP CENTER ALBUQUERQUE NM 87102	26	23	7-46	15	40	17-64	86	8	3-17	110	0	0-10	332	2	3-9	127	0	1-11	45	0	0-26	548	3	3-7	190	1	0-5
REHOBOTH MC KINLEY CHRISTI GALLUP NM 87301	10	0	2-55	9	33	18-76	15	0	1-36	1	0	0-100	40	0	1-17	9	11	1-50	4	0	0-100	25	4	1-24	15	0	0-78
ROOSEVELT GENERAL HOSPITAL PORTALES NM 88130	1	100	2-98	6	67	14-81	1	100	0-100	1	0	0-100	49	4	1-16	6	33	0-67	6	0	0-100	19	11	0-30	14	0	0-49
RUIDOSO HONDO VALLEY GEN H RUIDOSO NM 88345	2	0	3-91	4	0	6-81	2	0	0-99	.	.		41	7	1-17	10	0	1-47	7	0	0-100	21	5	1-28	23	0	0-50
SAN JUAN REGIONAL MED CTR FARMINGTON NM 87401	12	8	7-57	11	36	13-66	24	4	1-27	6	0	0-100	81	4	1-12	32	3	0-23	11	0	0-100	42	5	1-16	59	0	0-12
SIERRA VISTA HOSPITAL TRUTH OR CONSEQUENCES NM 87901	10	0	5-58	3	100	3-84	5	0	0-69	4	0	0-100	58	3	1-15	6	17	1-63	1	0	0-100	45	2	1-17	9	0	0-78
SOCORRO GENERAL HOSPITAL SOCORRO NM 87801	1	0	1-97	2	50	1-89	3	0	0-82	.	.		31	0	1-21	3	33	0-94	.	.		7	0	0-70	13	0	0-63
ST JOSEPH WEST MESA HOSPIT ALBUQUERQUE NM 87114	2	0	0-92	4	75	7-82	19	0	1-32	3	0	0-100	36	8	1-19	18	11	1-32	1	0	0-100	22	5	0-27	17	0	0-45
ST JOSEPHS HOSP ALBUQUERQUE NM 87102	25	16	8-47	18	28	17-61	65	9	3-19	155	0	0-5	154	5	2-11	88	2	1-13	4	0	0-100	76	4	1-12	262	2	1-5
ST MARYS HOSP ROSWELL NM 88201	8	13	2-60	9	44	8-64	37	11	2-22	8	0	0-99	73	3	1-13	76	0	0-14	4	0	0-100	42	0	1-16	127	2	0-7
ST VINCENT HOSP SANTA FE NM 87501	17	35	7-52	15	40	14-61	73	8	3-17	30	0	0-48	218	3	3-10	142	1	1-11	21	0	0-98	65	6	2-14	130	3	0-6
UNION CO GENERAL HOSP CLAYTON NM 88415	4	25	8-84	3	33	5-86	.	.		1	0	0-100	21	10	2-30	7	0	1-57	.	.		14	7	1-37	5	0	0-98
UNIV OF NM HOSP BCMC ALBUQUERQUE NM 87106	39	8	5-38	8	63	16-76	31	13	3-26	8	0	0-99	66	6	2-14	45	4	1-19	7	0	0-100	62	2	1-14	48	2	0-16
VALENCIA PRESBYTERIAN HOSP BELEN NM 87002	6	17	4-69	4	50	6-81	5	0	0-75	.	.		50	2	1-15	8	0	1-53	8	0	0-99	15	0	0-37	14	0	0-73
ZUNI PHS INDIAN HOSPITAL ZUNI NM 87327	6	0	3-68	.	.		.	.		.	.		5	0	0-75	1	0	0-98	.	.		.	.		3	0	0-100

*Written Comments Not Submitted.

Artesia General Hospital

COMMENTS ON HCFA MORTALITY DATA

We have discovered errors in the HCFA mortality data which is to be published in December, 1987. Further, we feel there is information with significant statistical and clinical impact that is overlooked by the HCFA study.

Two patients, [redacted] and [redacted], were transferred from Artesia General Hospital but were erroneously cited as having had their last hospitalization here. In both instances, the patients were transferred by ambulance to the Veteran's Administration Hospital in Albuquerque, New Mexico. Elimination of these two cases drops our overall mortality rate from 14% to 13%.

With one exception, the mortality rates for Artesia General Hospital were within the range predicted. The exception was the cancer category, but there are sound reasons why our mortality rate was high.

Statistics such as those of the HCFA study presume that each patient will undergo a predicted course of treatment for their illness. With cancer patients this is not necessarily the case. One may expect that a number of cancer patients with advanced disease will choose to receive palliative care only. While this is certain to be true in large institutions as well as small ones, the statistical impact of each patient who decides to accept only supportive care is magnified in small hospitals such as Artesia General Hospital. A full 40% of the 15 cancer patients included in the HCFA study that were admitted to Artesia General Hospital either refused treatment to prolong life or were regarded as terminal on admission. A mortality rate of 40% was therefore the best rate we could possibly attain.

The HCFA statistics could be made more meaningful if an index of the stage or severity of a given illness was included in calculating the range of predicted mortality. Given the circumstances of our patients, it is reasonable to expect that the predicted mortality range for cancer patients at Artesia General Hospital would be higher if such an index was used.

We appreciate the opportunity to comment on the mortality data prior to its publication. While we support the expressed intention of HCFA to improve the quality of care rendered in the hospitals of America, we feel that the mortality statistics have severe limitations in this regard. Further, releasing this information to the general public is potentially inflammatory. Without access to detailed patient information, conclusions drawn by members of the general public will inevitably be poorly grounded.

702 North 13th Street / Artesia, New Mexico 88210 / 505-748-3333
An affiliate of **Southwest Community Health Services**

```
HOSPITAL = 320077          CUBA HOSPITAL                                        CUBA NM

                            DIAGNOSTIC                    CASES     ACTUAL            RANGE OF
                            CATEGORY                              MORTALITY RATE      PREDICTED
                                                                                    MORTA' TTY RATES

    ALL CAUSES                                             14        7 %             3    )  42 %
   GC - GASTROINTESTINAL CATASTROPHES                       2        0 %             0    0  93 %
   GI - GASTROINTESTINAL DISEASE                            3        0 %             0   TO  98 %
   GU - UROLOGIC DISEASE                                    1        0 %             0   TO  99 %
   HM - SEVERE CHRONIC HEART DISEASE                        3        0 %             2   TO  81 %
   OP - ORTHOPEDIC DISORDERS                                1        0 %             0   TO 100 %
   PN - PULMONARY DISEASE                                   2        0 %             1   TO  89 %
```

Please note: We are a small 9 bed rural hospital and we usually transfer serious cases to another facility. This information is probably correct but we may not know of the death of a person following transfer from our facility.

Don Alexander
Administrator
9/29/87

Eastern New Mexico
MEDICAL
CENTER

October 30, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

RE: Mortality Data for 1986

Gentlemen:

We were able to verify the data for severe acute heart disease as being correct as this was the only category in which our mortality was high, being 61% with predicted mortality rates of 22 to 57%. One expired the day after admission which we can not verify as our records have no documentation concerning her death.

After reviewing the above mentioned 17 deaths in this category, the following factors we feel are of importance in helping to understand the reason for our percentage of 61%:

(1) Age ranges: 3 patients were 65 to 70 years old, 7 were 71 to 80 years, and 7 were 81 to 95 years old. A large number of our community population is retirement age.

(2) Consultations obtained: 7 of the 17 patients had consultations.

(3) Order for "No Code" status: 9 of the 17 had "No Code" orders written.

(4) History of heart disease: 14 of the 17 had previous heart disease documented in the record which we feel is of importance since the primary diagnosis may be an acute flare up of a chronic illness.

(5) Length of Stay: 9 died within 24 hours, 4 died within 2 to 4 days, 4 died within 7 to 15 days. This factor is mentioned as the first 72 hours is such a critical time for the patient with acute heart problems.

The following are actual cases which we feel should be mentioned individually to further explain the severity of such cases:

[redacted] 77 year old who was essentially brain dead when brought in and taken to ICU. Patient was completely unresponsive and never responded.

[redacted] 87 year old arrested at the physician's office and arrested again shortly after arrival to the hospital with not much hope for survival.

[redacted] 83 year old who arrested at home and was unresponsive on arrival. There was no cardiac activity on the monitor. Patient never regained consciousness.

405 West Country Club Road
Roswell, New Mexico 88201
(505) 622-8170

Eastern New Mexico
MEDICAL
CENTER

[redacted] 69 year old found unresponsive after being admitted to the hospital. Patient complained of thumping abdominal pain and x-ray showed evidence of congestive heart failure.

[redacted] 94 year old whose final diagnosis was cardiopulmonary arrest but noting that she had renal failure and chronic obstructive lung disease. Patient after admission developed pneumonia and expired quietly.

[redacted] 65 year old whose final diagnosis was cardiopulmonary arrest. Autopsy revealed ischemic cardiomyopathy, left ventricular failure, pulmonary edema with no evidence of acute heart problem.

We hope these comments will enable others to better understand our statistics.

Sincerely,

Frederick Doe, M.D.
Chairman, Surgical Case, Mortality-Morbidity Review Committee

405 West Country Club Road
Roswell, New Mexico 88201
(505) 622 - 8170

DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE
HEALTH RESOURCES AND SERVICES ADMINISTRATION

Navajo Area Indian Health Service
GALLUP INDIAN MEDICAL CENTER
516 East Nizhoni Boulevard
P.O. Box 1337
Gallup, New Mexico 87301
(505) 722-1401

October 9, 1987

Dr. Roper
Administrator, Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

As requested, I am enclosing comments on behalf of Gallup Indian Medical Center, (#320061).

> "The data consisting of patient names and catagories should prove to be a useful Quality Assurance tool".

Sincerely,

Donald E. Bedingfeld, M. D.
Clinical Director

DEB:kjm:100987

cc: Mr. MLincoln, AD/NAIHS

HOLY CROSS HOSPITAL

P.O. BOX DD
TAOS, NEW MEXICO 87571
505/758-8883 Medicare provider #320013

October 16, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Thank you for the opportunity to submit comments about the publication of individual hospital mortality information.

It should be pointed out that mortality stastics alone do not reflect the quality of care rendered in a health care institution. There are many factors and variables which impact this one stastic for any given facility. Large referral centers care for a higher percentage of critically ill patients and small rural hospitals have relatively few patients in some categories so mortality rate percentages are very misleading, such as, 100% for one case.

The context in which this information is presented will be most important and the need to develop other measures of quality must be a priority.

Sincerely,

Rachel Devlin

Rachel Devlin, RN
QA Coordinator

MEMORIAL GENERAL HOSPITAL

October 23, 1987

William L. Roper, M.D.
Administrator
Medicare Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

I am writing to acknowledge receipt of the mortality information HCFA plans to publish in December relative to Memorial General Hospital in Las Cruces, New Mexico. This mortality information appears to be accurate. We are pleased that Memorial General Hospital's actual mortality rate falls within HCFA's predicted range of mortality in total, as well as by diagnostic category.

As part of Memorial General Hospital's quality assurance program, mortality data is carefully reviewed. Based upon this review, we are confident that all mortalities at Memorial General Hospital in 1986 were reasonably expected given the specific circumstances of each occurrence.

Sincerely,

William Webster
Administrator

lg

Telshor Boulevard and University Avenue Las Cruces, New Mexico 88001 (505) 522-8641

ACUTE CARE
Hospital Drive

Raton, New Mexico 87740
(505) 445-3661

State of New Mexico
Since 1904
MINERS' COLFAX MEDICAL CENTER
Raton, New Mexico

LONG TERM CARE
900 South Sixth
P.O. Box 1067
Raton, New Mexico 87740
(505) 445-2741

October 16, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

The medicare provider number for the hospital Northern Colfax County Hospital in Raton, New Mexico is 320049. The following are comments on the HCFA Mortality data:

1. The data used by HCFA indicate that a total of 29 Medicare patients admitted to NCCH died within 30 days of admission. Of these, 19 died while still a patient in the hospital, while 10 died after discharge from NCCH. In all of the diagnostic categories, the hospital's actual mortality rate falls within the range of the predicted mortality rate.

2. Of the age of patients included in the data, the youngest was 55, the oldest was 91.

On December 1, 1986, Northern Colfax County Hospital ceased operations as a result of the merger with Miners' Hospital - State of New Mexico.

Sincerely,

Marquita George

Marquita George
Chief Executive Officer

MG/dmg

"History of Caring - Future of Promise"

ACUTE CARE
Hospital Drive

Raton, New Mexico 87740
(505) 445-3661

State of New Mexico
MINERS' COLFAX
MEDICAL CENTER
Raton, New Mexico
Since 1904

LONG TERM CARE
900 South Sixth
P.O. Box 1067
Raton, New Mexico 87740
(505) 445-2741

October 16, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Concerning the HCFA Mortality data, this hospital's medicare provider number is 320069. The following are the hospital's comments on the mortality data:

1. The data used by HCFA indicate that a total of 14 Medicare patients admitted to Miners' Hospital in 1986 died within 30 days of admission. Of these, 10 died while still a patient in the hospital, while 4 died after discharge from Miners' Hospital. In all of the diagnostic categories the hospital's actual mortality rate falls within the range of the predicted mortality rate.

2. Of the age of patients included in the data, the youngest was 65, the oldest was 94.

On December 1, 1986, Miners' Hospital merged with Northern Colfax County Hospital and the resulting institution is named Miners' Colfax Medical Center.

Sincerely,

Marquita George

Marquita George
Chief Executive Officer

MG/dmg

"History of Caring - Future of Promise"

ROOSEVELT GENERAL HOSPITAL

1700 SOUTH AVENUE O P. O. DRAWER 60 PORTALES, NEW MEXICO 88130 PH. 505-356-4411

October 21, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Attention: William L. Roper, M.D.
Administrator

RE: MEDICARE MORTALITY - 1986

Dear Dr. Roper:

Enclosed are comments submitted by Roosevelt General Hospital for inclusion in the December publication of HCFA's mortality statistics on short term acute care hospitals.

If additional information is required, please contact me.

Sincerely yours,

George McGowan
Executive Director

GM/dd

ROOSEVELT GENERAL HOSPITAL

1700 SOUTH AVENUE O P. O. DRAWER 60 PORTALES, NEW MEXICO 88130 PH. 505-356-4411

MEDICARE PROVIDER NUMBER: 320023

Roosevelt General Hospital is located in rural Eastern New Mexico. Our primary service area is approximately a 50 square mile radius with a population of 50,000. Since we are a rural facility and the primary providerfor the above area with only one nursing home that has 49 beds, our State licensure allows us to have a Swing-Bed facility to take care of skilled and intermediate level of care patients in our acute hospital area.

Of the 41 deaths reported by the Health Care Financing Administration (HCFA), 11 of these deaths occurred in our Swing-Bed facility. Five of these patients were at a skilled level of care and six at an intermediate level of care. Swing-Bed is an important asset to rural health care due to the fact that these 11 patients were unable to return home due to their medical conditions and/or lack of family or supportive services to care for them.

HIC #[redacted] This patient was assigned a HCFA code of renal disease. This record was miscoded at the hospital level. The patient's renal disease was secondary to the principle diagnosis of cancer. The actual cause of death to this patient was Histiocytic Lymphoma with widespread metastases to the bladder, ureter and blood vessels. Renal failure was due to invasion of bladder with blockage of ureters.

HIC #[redacted]: This 82 year old female is listed as a low risk heart disease. The attending physician felt this diagnostic category is not correct and high risk heart disease should be assigned. The patient was treated this admission for Supraventricular Tachycardia, along with Congestive Heart Disease, Chronic Obstructive Pulmonary Disease and Asthma. The patient was on floor care at time of death and the patient's condition was considered stable at this time. This patient has a long history of Coronary Artery Disease. During this admission, the patient was treated in the Special Care Unit requiring Verapamil, NTG both sublingual and patches. Her electrocardiogram showed ischemic changes with evidence of left ventricular hypertrophy and a previous myocardial infarction. The patient's cause of death was severe heart disease.

HIC #[redacted] This 67 year old male who suffered from severe Chronic Obstructive Pulmonary Disease and Manic Depression was admitted with a self-inflicted gunshot wound to the chest. After seven days of intensive care and treatment, both medically and surgically, the patient expired due to complications.

HIC #[redacted]: This 72 year old male was admitted with Chronic Obstructive Disease, Chronic Malnutrition, Subtotal Gastrectomy and Macular Degenerative Disease. On the day of admission to this hospital, the patient had sought care at a Veteran's Administration facility where he was told that he did not require acute admission. After three hours of acute care at our facility, the patient expired. Cause of death was Medullary Depression due to Respiratory Arrest due to Myocardial Infarction, Chronic Obstructive Pulmonary Disease, and Bilateral Macular Degeneration, Status post Gastrectomy and Osteoarthritis.

HIC #[redacted]: This 74 year old male was admitted to acute care after suffering a respiratory arrest at home. Admitting diagnosis of Aneurysm of the Aorta was made. This patient was taken to the Operating Room where he received 20 units of packed red blood cells and two units of fresh frozen plasma. He was found to have a hugh Abdominal Aortic Aneurysm just above the bifurcation of the abdominal aorta. This was resected and a graft was done. The patient developed disseminated intravascular coagulation and cardiac arrest secondary to circulatory collapse.

In conclusion, this hospital-specific mortality presents the following problems:

1. The severity of illness is not adequately reflected by data;
2 Lumping deaths into the broad categories may obscure medical conditions;
3. Deaths reported by DRG may not reflect actual cause of death;
4. Factors post-hospitalization contributing to death may not be adequately reflected, i.e. terminal cancer, heart disease, etc.;
5. Ages of patients are not reflected except in specific responses. The age of death in the majority of our patients exceeded the normal life expectancy.

San Juan Regional
MEDICAL CENTER

October 21, 1987 Provider #32-0005

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

SUBJECT: COMMENTS ON 1986 MEDICARE MORTALITY STATISTICS

San Juan Regional Medical Center submits the following comments regarding mortality rates of its patients in the Medicare program during 1986.

The data used by HCFA indicate that a total of 130 Medicare patients admitted to San Juan Regional Medical Center died within 30 days of admission. Of these, 39 were listed as having died after discharge. Our records indicate one of these 39 actually died in the hospital. All listed information concerning the 91 other patients who died in the hospital is in agreement with our records. We cannot verify the accuracy of information on those patients reported to have died after discharge, as such information is not included in the patient´s medical record.

San Juan Regional Medical Center agrees with HCFA that the mortality information itself cannot be used to make judgments about the quality of care in an individual hospital, or to make comparisons among hospitals. Such an assessment of hospital performance is dependent upon many variables and requires a look at many quality indicators, of which mortality is but one.

San Juan Regional Medical Center is a rural referral center as designated by HCFA. The level of severity of illness as defined by the hospital´s "case-mix ratio" is higher than typically found at other rural hospitals and is comparable to many urban referral centers. San Juan Regional has traditionally, and continues to care for patients with extremely severe illnesses and injuries. Many of these complex cases come from distant, sparsely populated regions of our service area.

San Juan Regional is also a designated Level II Trauma Center with an active medical outreach program to vast areas of northern and northwest New Mexico, southwest Colorado, southeast Utah and northeast Arizona.

(Continued)

San Juan
Regional
MEDICAL CENTER

Health Care Financing Administration
Page Two

Quality patient care is, and always has been the top priority of San Juan Regional Medical Center. The hospital maintains an active quality assurance program. The interdisciplinary quality assurance committee meets monthly and consists of representatives from each medical staff department, a full-time quality assurance coordinator, nursing, and other ancillary departments. SJRMC maintains a hospital wide quality monitoring process, currently monitoring many of the future proposed JCAH quality indicators.

San Juan Regional Medical Center is a 144-bed facility, community-owned and controlled, and a member of the Voluntary Hospitals of America (VHA). Six specialized inpatient nursing care units serve over 5,000 patients each year. Comprehensive diagnositc imaging, laboratory and rehabilitation services are provided for inpatients and outpatients. Over 65 physicians in 20 medical specialties (over 75% of whom are Board Certified or Board Eligible) and over 300 registered nurses, therapists, pharmacists and technicians provide care at San Juan Regional Medical Center.

San Juan Regional has provided for the area's health care needs for over 60 years. As a "sole community provider" hospital, the tradition of providing charity care also continues. It is governed by a group of over 80 community representatives who elect the Board of Directors, responsible for hospital policy.

Sincerely,

Donald R. Carlson
Executive Director

Encl./Corrected listing

801 West Maple Street
Farmington, New Mexico 87401
Telephone: (505) 325-5011

VHA
Partner-VHA/Mtn. States
Affiliate of the Voluntary
Hospitals of America System.

Socorro General Hospital

October 14, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Provider #320032

Dear Sirs:

Please include the following comments in your December publication of our facility's mortality statistics:

"Notwithstanding HCFA qualifying comments about the validity of these mortality statistics, Socorro General Hospital questions the validity based on the small total sample size. Groups in which 10 or less cases occured (CE, GC, GV, HL, HM, HS, RN SE, TR) are certainly statistically invalid.

The fact that the rates reflect beneficiaries and not discharges inflates the final figures.

Of the remaining groups which have samples worth reviewing, the cancer (CA) category deserves some explanation. Socorro General Hospital typically has Medicare beneficiaries with peculiar characteristics in this group. Our cancer patients are often diagnosed at a different facility. They often have returned to this primary care facility in terminal condition seeking to die with dignity in their home town. More treatable cases seeking chemotherapy or radiation therapy are seen at the referral hospitals in Albuquerque. Although the grouping includes all types of cancer, we see a high proportion of terminal cases.

Of the 7 cancer deaths which generate our CA mortality rate, 5 involved end-stage colon cancer or in-operable brain or liver cancer.

All deaths at Socorro General Hospital are reviewed by the Medical Staff for quality of care concerns."

P.O. Box 1009 / Socorro, New Mexico 87801 / 505-835-1140
An affiliate of **Southwest Community Health Services**

Page 2 con't.

Thank you for including the above information in your publication of statistics.

Sincerely,

Jeff Dye

Jeffrey M. Dye
Administrator

JMD/pas

St. Joseph Healthcare
CORPORATION

400 Walter NE
Albuquerque, New Mexico 87102
505-848-8100

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RE: MC Provider #320074

Dear Dr. Roper:

Thank you for the opportunity to review and comment regarding the Medicare mortality statistics for our acute care facility for 1986.

Our review indicates a fairly high degree of accuracy in the statistical data provided. Total review of the cases presented satisfied the reviewers that a majority of these patients expired due to exacerbation of long-standing disease or following catastrophic events complicated by chronic disease. It is noted that 20-30 percent of these patients were admitted from, and/or discharged to, long-term care facilities due to their fragile and incapacitating physical status. We would further remark that a small facility with low volume admissions will, perhaps, appear to have statistically high mortality rates.

The management and medical staff of this facility appreciate the complexity of the task you have undertaken. We will continue to monitor the quality of services rendered within our hospitals in order to assure the community appropriate, safe health care.

Very truly yours,

John M. Kirk
President

JMK/shm

St. Joseph Healthcare
CORPORATION

400 Walter NE
Albuquerque New Mexico [illegible]
505-848 8100

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RE: MC Provider #320009

Dear Dr. Roper:

Thank you for the opportunity to review and comment regarding the Medicare mortality statistics for our acute care facility for 1986.

Our review of the data provided included all those patients for whom the date of death was reported as within 30 days of discharge. There is a 9 percent error rate in this data; five (5) of the fifty-six (56) patients in fact expired in the hospital on the date of discharge. In addition, two (2) of these discharged patients were transferred to other acute care hospitals.

It is noted that 72 percent of the remaining discharged patients were designated, per request of the patient and family, as terminally ill and not candidates for other than palliative care and comfort measures. These patients were discharged to long-term care facilities, hospice or home health care services.

Reviewing all the cases presented, we find most of the data to be fairly accurate.

The management and medical staff of this facility appreciate the complexity of the task you have undertaken. We will continue to monitor the quality of services rendered within our hospitals in order to assure the community appropriate, safe health care.

Very truly yours,

John M. Kirk
President

JMK/shm

St. Vincent Hospital

Santa Fe, New Mexico 87501—Telephone (505)983-3361

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper,

St. Vincent Hospital, Medicare Provider Number 320002, thanks you for the opportunity to comment on the HCFA mortality data to be published in December, 1987.

Representatives of St. Vincent Hospital have reviewed the data provided and are in general agreement with the data with the exception of certain discrepancies in dates of death as noted in the accompaning copy of list of individuals. In addition, St. Vincent Hospital notes that in the case of patient ID# [redacted] (a patient whose death occurred in the year subsequent to the year of admission), the patient was admited to St. Vincent Hospital on 1-5-87 and died at St. Vincent Hospital on 1-23-87. Consistant with the explanatory information provided by HCFA, St. Vincent Hospital assumes that such case would be appropriately attributed to 1987 mortality data.

St. Vincent Hospital intends to use the mortality data and specific information as part of its information base for its continuing quality assurance program.

Yours truly,

Charles F Boatright

Charles F. Boatright, M.D.
Vice-President for Medical Affairs

CFB:syk

Serving Our Community - Sharing Our Lives

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

UNM

UNIVERSITY OF NEW MEXICO HOSPITAL

BERNALILLO COUNTY MEDICAL CENTER
2211 LOMAS BOULEVARD, N.E. • ALBUQUERQUE, NEW MEXICO 87106 • (505) 843-2111

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

I would like to take this opportunity to respond on behalf of UNM Hospital, relative to the release of the hospital mortality rates for 1986 by the Health Care Financing Administration (HCFA).

As an introduction, it should be noted that the University of New Mexico Hospital is the only non-federal teaching hospital in New Mexico. The hospital operates 330 total beds, 24 percent of which are designated as intensive care. In all cases, a high number of intensive care beds influences mortality rates. Additionally, the following factors that obtain to UNMH have an impact on mortality rates:

- UNM Hospital provides tertiary care (the highest level of hospital care) to residents of the entire state of New Mexico; in fact, the level of care required by the average patient admitted to UNMH is one of the highest in the state and well above the national average according to the HCFA case mix index (national average: 1.0 -- UNMH: 1.3079)

- New Mexico is primarily a rural state, with low per capita income (46th in the nation;) Often patients present with advanced stages of disease and/or co-morbidity related to limited financial assets.

- Geographic isolation and its rural nature of New Mexico impedes timely and continued access to health care for many residents:

These factors all tend to produce a higher-than-average degree of illness in patients presenting at UNM Hospital.

HCFA's review of 1,083 Medicare cases entering UNMH in 1986 indicates an 11 percent mortality rate, or 120 deaths. Deaths actually occurring at UNM Hospital, however, totalled 82, for a mortality rate of 7.5%. The other 38 deaths occurred within 30 days after discharge from UNM Hospital.

UNMH was well within the predicted ranges for all diagnostic categories. We have reviewed four diagnostic categories in which this hospital's mortality rate was above the midpoint of the predicted values.

1. Metabolic/Electrolyte Disturbances:

   The range of predicted mortality rates as derived by HCFA for this diagnostic category was 5 - 36%. UNMH shows a 36% actual mortality rate. This represents 10 deaths, of which 5 occurred at UNMH. One patient was admitted in diabetic coma, 2 were terminal cancer patients, 1 suffered chronic obstructive pulmonary disease, and 1 was a suicide. Of the 5 UNMH deaths, all were admitted with patient and/or family requests for "do not resuscitate" orders.

2. Pulmonary Disease:

   The range of predicted mortality rates was 13 - 30%. UNMH's actual mortality rate was 24 percent. This represents 26 deaths. Eighteen of these deaths occurred at UNMH. Of the 18, 94% were admitted with patient and/or family requests for "do not resuscitate" orders. Eleven of the 18 patients had other illnesses in addition to pulmonary disease.

3. Sepsis:

   The range of predicted mortality rates was 17 - 76% and UNMH shows an actual rate of 63%. This represents 5 deaths, 3 of which occurred at UNMH. All 3 patients were admitted with pre-existing infections compounding their severity of illness, and were admitted with patient and/or family requests for "do not resuscitate" orders.

4. Severe Acute Heart Disease

   The range of predicted mortality rates was 15 - 57%, and UNMH shows an actual rate of 39%. This represents 7 deaths, 6 of which occurred at UNMH. Of these 6 patients, 5 were admitted with other diseases that complicated the primary diagnosis and contributed to death. Two had previous histories of chronic heart disease, 1 was in kidney failure, 1 had chronic obstructive pulmonary disease, and 1 had Alzheimer's disease. Four of the 6 patients were admitted with patient and/or family requests of "do not resuscitate".

The University of New Mexico Hospital medical staff conducts thorough reviews of all mortality cases. This ongoing process provides continuous feedback regarding the facility's appropriateness and quality of care for all patients.

Although the release of mortality data has been justified by HCFA officials, I urge as a minimum that the public receive clear explanations regarding the interpretation of this information. To presume that the average citizen can adequately draw rational conclusions from this raw data is fallacious.

I thank you for the opportunity to comment and I trust you will utilize this information.

Sincerely

William H. Johnson, Jr.
Administrator

WHJ/jh

Valencia Presbyterian Hospital

October 16, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration

Dear Dr. Roper:

Thank you for the opportunity to provide comments on our 1986 Mortality data to be published in the Federal Register. I have two overall comments.

First, I strongly feel that data should not be reported when the sample size is less than 10 or 10% of total cases. Small sample sizes are not statistically valid. High mortality rates with a small sample size can be as much a function of pure chance than an indicator of a quality problem.

A case in point is the 80% mortality rate for Medicare patients with severe acute heart disease at our facility. Our Medicine Review Committee reviewed each of the charts of the patients who expired here. They felt that all cases were appropriately handled. All patients were acutely ill at time of admission. In 3 out of 4 cases, the families requested that CPR not be initiated.

This leads to my second point. I believe mortality may be a very poor quality indicator. Death is inevitable for all of us. In many cases, death is an expected or at least predictable outcome of a hospitalization. Indicators which are based on something that can be prevented in most cases (such as nosocomial infection rates) are better indicators in my view.

Thank you again for this opportunity to comment.

Cordially,

John A. Zondlo
Administrator

JAZ/bm

cc: Jerry Cantwell
Valerie Kirkup

609 South Christopher Road / Post Office Box 5 / Belen, New Mexico 87002 / 505-864-5454
An affiliate of **Southwest Community Health Services**

New York

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
A BARTON HEPBURN HOSP OGOENSBURG NY 13669	NY-23 *	1105	11	8-15	71	23	13-35	35	34	12-41	27	22	7-39	64	27	14-36	37	14	24-55	29	24	9-42	93	24	13-31
A LINOSAY OLIVE B OCONNOR OELHI NY 13753	NY-24 *	362	14	11-21	10	50	20-76	8	25	8-66	5	20	3-71	24	17	13-48	8	63	15-74	20	25	9-48	65	20	14-35
A O FOX MEMORIAL HOSP ONEONTA NY 13820	NY-25	1175	12	9-16	77	29	17-40	38	24	18-48	16	19	4-43	71	31	14-35	38	47	24-55	19	11	7-45	107	22	12-30
AOIRONOACK REGIONAL HOSP CORINTH NY 12822	NY-26 *	210	8	9-20	13	31	9-55	7	14	6-66	6	17	4-66	17	6	7-45	7	57	15-78	2	0	2-90	18	11	10-50
ALBANY MEO CTR HOSP ALBANY NY 12208	NY-27	2846	10	8-14	277	16	18-33	90	32	19-39	43	16	9-35	83	24	17-36	89	37	27-49	28	14	7-38	129	21	13-30
ALBERT LINOLEY LEE MEMORIA FULTON NY 13069	NY-28	581	11	9-17	40	15	10-38	29	14	16-49	7	14	3-61	43	28	12-37	16	31	20-65	31	13	11-43	49	27	10-33
ALICE HYOE MEMORIAL HOSP MALONE NY 12953	NY-29 *	747	12	9-16	66	33	17-41	27	30	15-50	17	6	5-44	43	30	14-41	27	37	20-56	14	14	5-47	53	17	8-30
AMSTEROAM MEMORIAL HOSP AMSTEROAM NY 12010	NY-30	933	11	9-17	53	25	16-43	36	19	16-46	6	17	2-64	62	23	14-35	52	37	25-52	13	31	8-55	90	22	14-33
AROEN HILL HOSP GOSHEN NY 10924	NY-31	1144	16	11-18	82	30	18-40	48	42	18-44	23	30	6-40	54	26	14-38	39	44	25-56	25	24	5-37	176	27	16-31
ARNOLO GREGORY MEMORIAL HO ALBION NY 14411	NY-32 *	279	18	9-19	8	25	7-64	17	29	12-54	9	44	4-55	13	31	7-51	19	26	20-62	8	0	1-56	34	26	12-41
ARNOT OGOEN MEMORIAL HOSP ELMIRA NY 14901	NY-33 *	2123	10	9-15	167	20	18-35	49	33	18-44	49	20	10-35	90	19	15-33	90	26	28-50	36	6	7-35	161	17	14-28
ASTORIA GENERAL HOSP LONG ISLANO CITY NY 11102	NY-34 *	2689	13	10-16	225	32	18-35	111	17	21-39	63	30	9-31	204	25	16-28	95	32	29-50	63	21	11-35	223	24	15-28
AUBURN MEM HOSP AUBURN NY 13021	NY-35	2285	14	10-17	154	24	16-34	105	33	20-39	72	18	12-34	119	36	17-33	90	43	29-50	43	26	12-41	235	20	15-28
BAPTIST MEOICAL CENTER OF BROOKLYN NY 11208	NY-36 *	976	12	9-16	34	29	14-45	48	25	17-43	26	23	6-38	61	21	13-34	21	38	22-62	26	19	10-44	108	21	12-29
BAYLEY SETON HOSP STATEN ISLANO NY 10304	NY-37	798	9	7-14	44	39	16-44	16	13	12-54	12	17	5-50	37	19	10-36	22	45	20-60	17	12	8-50	84	11	10-28
BELLEVUE HOSP CENTER NEW YORK NY 10016	NY-38	1553	11	7-14	115	28	17-37	41	37	15-43	24	25	6-39	64	3	12-33	57	67	25-51	18	0	6-44	120	13	10-26
BELLEVUE MATERNITY HOSPITA SCHENECTAOY NY 12301	NY-39 *	23	0	1-28	7	0	2-59	.	.		.	.		.	.		-	.		.	.		.	.	
BENEOICTINE HOSPITAL KINGSTON NY 12401	NY-40 *	1722	11	9-16	104	24	19-39	63	19	17-40	43	19	11-37	91	25	16-34	73	29	25-49	35	17	12-42	164	17	12-26
BERTRANO CHAFFEE HOSP SPRINGVILLE NY 14141	NY-41 *	504	13	11-19	39	21	14-43	30	27	16-48	12	17	5-51	39	23	14-42	20	50	21-62	9	44	3-55	63	14	12-33
BETH ISRAEL MEDICAL CENTER NEW YORK NY 10003	NY-42	4236	10	10-16	528	19	17-31	178	12	23-38	91	9	10-29	143	22	18-33	137	26	32-50	74	19	11-34	347	22	18-30
BETHESDA HOSP NORTH HORNELL NY 14843	NY-43 *	7	0	0-60	.	.		.	.		.	.		.			-	.			.		2	0	1-89
BINGHAMTON PSYCHIATRIC CEN BINGHAMTON NY 13901	NY-44	62	13	1-16	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BOOTH MEMORIAL HOSP FLUSHING NY 11355	NY-45	4006	14	12-18	396	20	20-34	168	25	21-36	183	20	13-29	206	21	17-30	223	30	32-47	71	31	14-38	357	29	18-30
BRONX MUNICIPAL CENTER BRONX NY 10461	NY-46	2596	15	9-15	111	30	15-35	117	39	19-37	55	16	9-32	189	25	15-28	128	45	30-49	45	27	6-31	247	21	12-25
BRONX-LEBANON HOSP CTR BRONX NY 10456	NY-47 *	1660	9	9-16	106	21	18-39	45	31	16-43	28	18	7-37	142	16	15-30	36	44	25-57	71	14	10-32	155	12	12-26
BROOKOALE HOSP MEOICAL CEN BROOKLYN NY 11212	NY-48 *	3929	11	9-16	506	20	17-31	171	22	19-34	45	13	7-32	285	18	17-28	141	31	29-47	62	21	8-31	288	22	15-28

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
A BARTON HEPBURN HOSP OGOENSBURG NY 13669	6	17	6-71	8	0	10-70	40	5	3-24	87	0	0-16	102	8	2-13	83	4	1-13	12	0	0-92	68	6	1-13	52	0	0-13
A LINOSAY OLIVE B OCONNOR OELHI NY 13753	1	0	0-99	2	100	4-92	6	0	0-66	.	.		62	2	3-17	7	0	0-65	3	0	0-98	30	3	1-21	11	0	0-80
A O FOX MEMORIAL HOSP ONEONTA NY 13820	7	43	5-67	10	40	14-69	48	8	4-24	3	0	0-100	127	6	4-14	57	4	2-18	6	0	0-100	85	2	2-13	146	1	1-6
AOIRONOACK REGIONAL HOSP CORINTH NY 12822	1	100	0-99	5	0	6-75	.	.		.	.		29	3	1-22	2	0	1-89	.	.		38	0	1-18	2	0	0-100
ALBANY MEO CTR HOSP ALBANY NY 12208	66	9	10-39	15	40	21-69	65	12	3-19	95	0	0-10	170	8	3-11	102	2	1-12	31	0	0-28	361	9	3-8	184	1	0-6
ALBERT LINOLEY LEE MEMORIA FULTON NY 13069	5	0	1-71	3	0	7-88	17	12	2-37	19	0	0-86	57	7	2-16	24	4	1-27	9	0	0-100	45	4	1-16	48	0	0-14
ALICE HYOE MEMORIAL HOSP MALONE NY 12953	5	40	3-72	1	100	1-97	15	13	2-39	11	0	0-99	80	4	2-13	53	2	1-17	6	0	0-100	58	3	2-15	32	0	0-24
AMSTEROAM MEMORIAL HOSP AMSTEROAM NY 12010	2	100	4-93	5	0	6-76	22	5	3-32	.	.		116	5	2-12	54	4	1-16	9	0	0-99	104	6	1-10	65	2	0-11
AROEN HILL HOSP GOSHEN NY 10924	13	46	11-61	21	29	19-60	26	4	2-28	27	0	0-62	110	5	2-12	39	0	1-20	4	0	0-100	74	3	2-13	57	4	0-12
ARNOLO GREGORY MEMORIAL HO ALBION NY 14411	5	60	3-72	4	50	8-83	5	20	0-69	.	.		24	4	1-25	16	6	1-35	3	0	0-100	28	4	1-22	6	0	0-98
ARNOT OGOEN MEMORIAL HOSP ELMIRA NY 14901	21	38	13-56	22	36	18-59	46	7	2-21	119	0	0-8	187	4	2-9	56	0	1-16	20	0	0-68	341	6	3-9	133	1	0-6
ASTORIA GENERAL HOSP LONG ISLANO CITY NY 11102	10	20	6-60	28	39	22-60	67	10	4-19	66	0	0-23	284	5	3-9	149	3	2-11	18	0	0-96	236	3	2-8	166	1	0-6
AUBURN MEM HOSP AUBURN NY 13021	14	36	9-58	17	18	13-57	72	11	5-21	19	0	0-60	264	5	4-11	60	5	1-15	23	0	0-61	197	7	3-10	134	1	1-7
BAPTIST MEOICAL CENTER OF BROOKLYN NY 11208	5	40	2-71	13	38	16-67	21	5	2-32	14	0	0-99	52	10	2-18	55	9	2-17	2	0	0-100	112	4	2-11	55	0	0-17
BAYLEY SETON HOSP STATEN ISLANO NY 10304	8	25	4-63	5	20	6-76	7	0	1-58	75	0	0-12	52	12	2-18	41	2	1-19	2	0	0-100	64	2	1-13	33	3	0-19
BELLEVUE HOSP CENTER NEW YORK NY 10016	13	0	4-51	9	44	18-77	31	10	2-25	62	0	0-17	77	9	2-14	65	5	1-15	13	0	0-97	123	8	2-10	64	2	0-11
BELLEVUE MATERNITY HOSPITA SCHENECTAOY NY 12301	.	.		.	.		.	.		.	.		.	.		.	.		13	0	0-100	1	0	0-100	.	.	
BENEOICTINE HOSPITAL KINGSTON NY 12401	7	0	3-64	15	20	17-64	40	18	3-23	12	0	0-98	160	6	2-10	68	1	1-15	14	7	0-99	128	8	2-10	73	3	1-10
BERTRANO CHAFFEE HOSP SPRINGVILLE NY 14141	2	50	5-93	1	0	0-97	23	4	3-31	.	.		61	8	2-16	7	14	0-67	7	0	0-100	47	6	1-17	18	0	1-31
BETH ISRAEL MEOICAL CENTER NEW YORK NY 10003	37	32	11-46	75	37	27-53	4	0	0-76	230	0	0-3	412	5	3-9	248	3	2-10	32	0	0-43	283	5	3-9	87	1	0-9
BETHESOA HOSP NORTH HORNELL NY 14843	.			.	.		.	.		3	0	0-100	.	.		.	.			.					.		
BINGHAMTON PSYCHIATRIC CEN BINGHAMTON NY 13901		.		.	.		.	.		.	.			.		.	.		.	.		.	.		.		
BOOTH MEMORIAL HOSP FLUSHING NY 11355	51	18	8-39	40	50	28-61	115	8	5-17	47	0	0-18	388	5	4-10	218	6	3-12	24	0	0-41	346	4	3-8	116	1	0-7
BRONX MUNICIPAL CENTER BRONX NY 10461	18	28	6-50	18	56	19-64	64	22	4-20	9	11	0-99	157	8	3-11	116	9	2-13	20	0	0-95	208	3	2-8	71	3	0-10
BRONX-LEBANON HOSP CTR BRONX NY 10456	19	21	6-49	18	33	20-65	24	8	2-29	92	0	0-9	122	6	3-13	51	4	1-18	16	0	0-60	284	3	3-8	33	3	0-19
BROOKOALE HOSP MEOICAL CEN BROOKLYN NY 11212	28	29	8-46	27	33	23-61	88	5	4-17	217	0	0-4	337	4	2-8	300	2	1-9	40	3	0-29	327	4	3-8	88	1	0-9

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
BROOKHAVEN MEMORIAL HOSP PATCHOGUE NY 11772	NY-49 *	2561	13	10-17	207	29	20-36	111	25	21-39	38	18	9-36	170	26	18-32	128	30	28-46	64	22	10-33	244	18	14-27
BROOKLYN HOSP BROOKLYN NY 11201	NY-50 *	3363	13	11-18	313	28	20-35	174	20	22-37	71	11	10-32	225	17	18-31	107	40	31-52	118	23	10-29	368	20	17-28
BROOKS MEM HOSP OUNKIRK NY 14048	NY-51 *	1285	11	9-16	105	34	20-40	41	37	20-49	40	13	8-35	68	25	13-33	44	36	23-52	9	11	3-55	68	22	12-33
BRUNSWICK HOSP AMITYVILLE NY 11701	NY-52	2229	14	10-17	155	32	20-38	99	28	20-39	37	14	8-35	125	28	18-34	114	40	30-49	67	28	9-32	144	24	13-29
BRUNSWICK HOSP REHAB CENTE AMITYVILLE NY 11701	NY-53 *	5	0	0-81	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BUFFALO COLUMBUS HOSP BUFFALO NY 14201	NY-54 *	244	11	10-21	11	45	14-66	13	31	12-59	5	20	1-68	33	18	11-40	7	57	16-79	5	0	1-68	27	4	6-36
BUFFALO GENERAL HOSP BUFFALO NY 14203	NY-55 *	5221	11	9-15	451	19	18-32	157	25	21-37	114	23	12-30	209	23	18-31	196	35	31-47	103	18	14-34	309	23	15-27
BUFFALO PSYCH CENTER BUFFALO NY 14213	NY-56	72	8	1-14		.		.	.		.	.		.	.		.	.		.	.		.	.	
CABRINI MEOICAL CENTER NEW YORK NY 10003	NY-57	3169	8	7-14	260	19	19-34	71	18	19-40	34	15	8-36	159	21	17-31	50	32	26-54	42	17	11-39	242	14	16-29
CANTON POTSOAM HOSP POTSOAM NY 13676	NY-58 *	708	10	9-16	49	31	15-41	23	22	13-49	3	0	0-82	44	18	13-38	31	42	24-58	5	40	3-70	94	13	12-29
CARTHAGE AREA HOSP CARTHAGE NY 13619	NY-59 *	372	9	9-18	15	53	17-64	16	13	11-53	2	100	5-93	31	16	12-42	11	27	16-68	14	0	2-43	48	10	9-33
CATHOLIC MEO CTR OF BKLYN JAMAICA NY 11432	NY-60	6896	16	12-18	597	26	20-33	413	35	24-35	186	26	12-27	526	24	19-28	297	33	31-45	155	33	11-29	685	25	18-28
CENTRAL GEN HOSP PLAINVIEW NY 11803	NY-61	2451	12	9-15	215	25	18-34	88	25	19-39	60	18	11-34	121	28	16-32	78	42	27-50	32	9	8-38	188	21	14-28
CENTRAL ISLIP PSYCH CTR ME CENTRAL ISLIP NY 11722	NY-62 *	109	5	1-12	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CENTRAL SUFFOLK HOSP RIVERHEAO NY 11901	NY-63 *	1320	15	11-18	121	32	16-35	57	28	16-40	45	24	9-34	87	23	15-34	54	46	27-54	24	38	13-50	128	21	14-30
CHAMPLAIN VALLEY PHYSICIAN PLATTSBURGH NY 12901	NY-64	2197	10	9-16	168	29	22-39	77	22	18-39	44	16	10-35	128	20	16-31	70	37	28-52	44	7	7-32	182	12	13-27
CHENANGO MEMORIAL HOSP NORWICH NY 13815	NY-65 *	689	16	10-18	57	25	12-36	22	32	14-51	35	20	9-38	46	26	11-35	29	38	21-56	19	21	9-48	69	28	14-35
CHILOREN'S HOSP REHAB CEN UTICA NY 13502	NY-66 *	254	5	4-13	1	0	0-99	3	33	5-86	.	.		3	67	1-81	.	.		.	.		3	0	2-81
CHILORENS HOSP BUFFALO NY 14222	NY-67 *	2	0	0-100	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CHILOS HOSP ALBANY NY 12208	NY-68 *	487	1	0-10	2	0	2-90	1	100	1-97	.	.		3	33	3-82	.	.		3	0	3-83	3	0	1-81
CITY HOSP CENTER AT ELMHUR FLUSHING NY 11373	NY-69	2123	19	11-17	79	42	19-42	133	39	21-38	39	44	11-39	102	24	16-33	159	49	30-48	70	24	9-31	194	30	14-27
CLIFTON FINE HOSPITAL OGOENSBURG NY 13669	NY-70	131	15	9-23	5	60	9-79	4	50	5-79	8	25	8-66	7	29	5-63	9	56	15-73	1	0	0-99	19	5	5-40
CLIFTON SPRINGS HOSP CLIFTON SPRINGS NY 14432	NY-71 *	878	9	9-16	83	28	21-44	13	23	10-57	25	8	7-40	33	6	12-42	32	47	23-56	12	8	6-54	83	12	11-30
COHOES MEMORIAL HOSP COHOES NY 12047	NY-72 *	7	0	0-59	.	.		1	0	0-97	.	.		.	.		.	.		.	.		.	.	
COLUMBIA MEMORIAL HOSP HUDSON NY 12534	NY-73	1699	13	10-17	161	29	18-35	82	23	19-40	32	25	7-36	128	21	16-32	76	41	27-50	12	8	3-47	195	18	14-28
COMM GEN HOSP OF GREATER S SYRACUSE NY 13215	NY-74	2742	12	10-17	288	21	16-31	119	26	21-39	101	11	11-29	155	25	17-31	129	37	29-48	36	25	7-35	240	20	16-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
BROOKHAVEN MEMORIAL HOSP PATCHOGUE NY 11772	23	22	7-47	16	25	14-60	67	10	4-20	10	0	0-99	274	7	3-10	105	2	2-13	13	0	0-100	282	7	2-7	101	4	0-8
BROOKLYN HOSP BROOKLYN NY 11201	29	38	10-48	40	38	25-58	53	11	5-23	30	0	0-48	327	7	3-9	153	7	2-13	28	0	0-58	299	4	3-8	143	1	1-7
BROOKS MEM HOSP OUNKIRK NY 14048	3	0	5-86	6	0	11-78	31	6	3-27	42	0	0-29	144	6	3-12	67	1	1-15	9	11	0-86	107	3	2-12	133	2	1-7
BRUNSWICK HOSP AMITYVILLE NY 11701	23	35	15-57	28	29	17-54	75	13	4-19	14	0	0-87	160	9	3-12	76	4	2-15	11	9	0-58	214	4	2-8	90	4	0-8
BRUNSWICK HOSP REHAB CENTE AMITYVILLE NY 11701	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BUFFALO COLUMBUS HOSP BUFFALO NY 14201	3	33	2-83	7	29	18-82	12	0	2-43	.	.		14	0	1-37	5	0	0-92	1	0	0-100	16	0	0-34	16	0	0-43
BUFFALO GENERAL HOSP BUFFALO NY 14203	78	19	12-41	36	50	24-57	91	7	4-17	264	0	0-3	388	5	3-9	193	6	1-11	37	3	0-39	801	5	3-6	234	1	1-5
BUFFALO PSYCH CENTER BUFFALO NY 14213	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CABRINI MEOICAL CENTER NEW YORK NY 10003	21	24	10-53	1	100	1-97	50	16	4-22	265	0	0-3	352	4	3-9	218	4	1-10	14	0	0-95	290	4	3-8	163	1	0-6
CANTON POTSOAM HOSP POTSOAM NY 13676	7	29	8-72	4	25	9-84	16	6	1-35	34	0	0-38	66	3	2-15	39	0	1-20	2	0	0-100	72	1	1-13	38	0	0-18
CARTHAGE AREA HOSP CARTHAGE NY 13619	5	0	1-71	1	0	1-97	.	.		.	.		57	4	2-16	7	0	0-60	.	.		61	5	2-15	14	0	1-37
CATHOLIC MEO CTR OF BKLYN JAMAICA NY 11432	76	43	17-47	109	35	27-50	257	12	6-16	162	1	0-5	660	7	3-8	379	8	2-10	50	0	0-18	485	5	3-7	272	1	1-5
CENTRAL GEN HOSP PLAINVIEW NY 11803	27	26	12-50	16	56	18-64	66	6	3-19	157	0	0-5	217	4	3-10	114	2	1-12	22	0	0-38	219	4	3-9	127	1	0-7
CENTRAL ISLIP PSYCH CTR ME CENTRAL ISLIP NY 11722		.		.			.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CENTRAL SUFFOLK HOSP RIVERHEAO NY 11901	12	33	10-62	12	33	13-65	30	17	5-31	2	0	0-100	165	5	3-11	58	3	1-16	7	0	0-100	121	7	2-11	57	2	0-12
CHAMPLAIN VALLEY PHYSICIAN PLATTSBURGH NY 12901	16	19	8-54	12	8	13-64	41	5	4-25	91	1	0-10	210	7	3-11	45	4	2-20	13	0	0-99	187	5	2-9	130	1	0-7
CHENANGO MEMORIAL HOSP NORWICH NY 13815	3	33	6-87	8	25	11-70	41	12	4-25	20	5	0-76	60	12	1-14	50	4	1-17	10	0	0-100	47	11	2-17	19	5	0-35
CHILOREN'S HOSP REHAB CEN UTICA NY 13502	.	.		.	.		75	8	4-20	1	0	0-100	4	25	0-87	.	.		1	0	0-100	.	.		64	0	0-11
CHILORENS HOSP BUFFALO NY 14222	.	.		.			.	.		.	.		.	.		.	.					.	.		.	.	
CHILDS HOSP ALBANY NY 12208	1	0	0-97	1	0	1-97	.	.		396	0	0-2	13	0	1-39	2	0	0-98	3	0	0-100	3	0	0-88	4	0	0-87
CITY HOSP CENTER AT ELMHUR FLUSHING NY 11373	19	26	8-52	26	50	20-58	90	17	4-18	12	0	0-98	140	10	4-13	69	9	2-16	14	0	0-99	196	10	2-9	46	0	0-15
CLIFTON FINE HOSPITAL OGOENSBURG NY 13669	2	0	3-91	2	50	3-91	3	0	0-84	.	.		22	9	1-27	1	0	0-100	.	.		7	0	0-66	5	0	0-98
CLIFTON SPRINGS HOSP CLIFTON SPRINGS NY 14432	1	0	0-97	6	17	13-80	17	6	1-34	.	.		91	7	3-15	53	4	1-16	9	0	0-100	67	6	1-13	67	0	0-12
COHOES MEMORIAL HOSP COHOES NY 12047	.	.		.	.		2	0	0-98	.	.		1	0	0-98	.	.		.	.		.	.		.	.	
COLUMBIA MEMORIAL HOSP HUOSON NY 12534	7	43	3-65	8	38	8-67	58	7	4-21	45	4	0-21	214	5	3-10	67	3	3-18	17	0	0-83	126	6	2-10	78	0	0-9
COMM GEN HOSP OF GREATER S SYRACUSE NY 13215	24	46	11-51	25	24	22-61	82	6	4-19	16	0	0-81	344	3	3-9	140	7	2-12	27	0	0-35	137	7	3-11	216	2	1-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
COMMUNITY GEN HOSP OF SULL HARRIS NY 12742	NY-75	1480	11	10-17	61	36	18-43	51	18	17-42	37	16	7-33	107	15	15-32	77	32	28-51	42	19	10-37	171	13	13-28
COMMUNITY GEN HOSP-GROVER CALLICOON NY 12723	NY-76	269	10	9-19	13	54	14-63	11	36	11-62	4	25	3-76	24	8	10-44	7	14	11-74	7	14	5-64	33	6	8-36
COMMUNITY HOSP STAMFORD NY 12167	NY-77 *	225	11	9-20	10	40	11-65	10	0	12-66	1	0	0-98	24	17	10-43	9	67	22-79	1	0	0-99	28	7	8-38
COMMUNITY HOSP AT GLEN COV GLEN COVE NY 11542	NY-78 *	2075	13	11-18	183	20	19-36	99	30	21-41	51	18	11-35	156	26	18-32	57	47	28-55	94	28	16-38	182	19	15-30
COMMUNITY HOSP BROOKLYN BROOKLYN NY 11229	NY-79 *	1611	12	10-17	106	25	16-36	26	27	18-53	44	14	8-33	114	22	17-33	60	37	27-53	39	33	11-40	192	16	13-27
COMMUNITY HOSP OF SCHOHARI COBLESKILL NY 12043	NY-80	516	17	11-20	39	21	15-44	23	35	16-53	12	0	1-44	30	33	10-39	30	27	22-56	12	8	3-48	81	30	14-34
COMMUNITY HOSP OF WESTERN SMITHTOWN NY 11787	NY-81	2064	15	10-17	134	23	15-33	72	36	21-44	51	12	7-30	141	35	16-32	78	47	28-51	51	18	9-34	207	35	17-31
COMMUNITY MEMORIAL HOSP HAMILTON NY 13346	NY-82 *	428	11	8-16	38	24	12-41	16	19	11-53	5	40	2-68	10	10	6-55	22	27	19-58	6	0	3-65	45	20	10-34
CONEY ISLAND HOSP BROOKLYN NY 11235	NY-83	3154	21	13-20	124	32	19-38	167	57	23-38	52	27	11-35	275	19	19-31	364	43	35-48	73	26	10-33	232	35	18-32
CORNING HOSP CORNING NY 14830	NY-84 *	1260	11	9-16	87	31	19-41	51	18	19-44	34	18	10-39	61	31	14-36	36	44	24-55	26	27	13-49	134	13	12-28
CORTLAND MEMORIAL HOSP CORTLAND NY 13045	NY-85	1448	13	10-17	98	20	14-34	49	47	18-43	51	14	10-34	113	19	16-32	63	37	25-50	43	23	12-40	130	20	15-32
CROUSE-IRVING MEMORIAL HOS SYRACUSE NY 13210	NY-86	3461	11	9-15	379	18	16-31	121	30	19-36	92	14	10-29	158	23	17-32	130	31	29-48	57	18	11-36	249	23	15-28
CUBA MEMORIAL HOSP CUBA NY 14727	NY-87 *	334	9	8-17	15	27	9-53	7	43	7-67	9	0	5-58	21	5	8-43	9	33	18-76	22	9	5-39	35	11	8-35
DEEPDALE GENERAL HOSP LITTLE NECK NY 11362	NY-88 *	2013	11	8-14	145	23	15-33	53	32	18-43	41	12	8-34	132	26	17-32	45	20	26-55	45	38	12-39	177	22	15-29
DEGRAFF MEM HOSP NORTH TONAWANDA NY 14120	NY-89 *	1503	13	10-17	127	30	20-39	80	24	21-42	30	30	9-40	112	22	16-32	54	46	26-52	37	35	12-42	99	21	13-30
DELAWARE VALLEY HOSP INC WALTON NY 13856	NY-90 *	332	11	9-19	19	32	10-49	13	46	12-59	8	0	6-62	25	16	12-46	13	31	17-66	8	38	6-63	37	14	10-37
DOBBS FERRY HOSP DOBBS FERRY NY 10522	NY-91 *	296	15	9-18	13	23	7-52	13	62	12-59	5	20	2-69	19	42	11-50	11	45	16-69	3	67	1-81	35	17	10-38
DOCTORS HOSP NEW YORK NY 10028	NY-92	1927	10	10-16	199	20	15-31	70	14	21-43	69	13	10-31	61	18	15-37	70	27	30-55	43	16	8-35	165	19	17-32
DOCTORS HOSP OF STATEN ISL STATEN ISLAND NY 10304	NY-93 *	1192	14	10-17	77	30	18-40	28	21	18-52	31	10	8-37	65	11	13-34	61	46	30-56	12	17	1-46	137	15	13-29
E J NOBLE-ALEXANDRIA BAY ALEXANDRIA BAY NY 13607	NY-94 *	249	9	7-18	10	30	7-59	9	11	7-61	4	0	1-75	18	17	9-48	11	18	17-70	2	0	1-89	34	12	7-33
E J NOBLE-GOUVERNEUR GOUVERNEUR NY 13642	NY-95	234	13	8-19	13	31	5-48	8	38	10-68	8	25	2-56	19	37	8-45	13	31	18-67	4	0	1-75	38	8	8-34
EASTERN LONG ISLAND HOSP GREENPORT NY 11944	NY-96	683	12	8-16	53	25	12-37	25	20	14-49	16	19	5-44	41	29	11-37	26	23	21-58	8	0	2-56	61	23	11-32
ELIZABETH A HORTON MEMORIA MIDDLETOWN NY 10940	NY-97 *	2271	13	10-17	180	33	18-35	77	26	18-39	73	16	7-27	164	22	17-31	85	34	28-50	64	25	12-36	224	19	14-27
ELIZABETHTOWN COMMUNITY HO ELIZABETHTOWN NY 12932	NY-98	217	15	10-21	15	80	13-59	9	11	9-65	3	33	9-90	18	11	10-49	11	27	13-64	5	0	1-68	18	17	7-44
ELLENVILLE COMMUNITY HOSP ELLENVILLE NY 12428	NY-99	390	14	9-18	28	43	17-52	19	26	14-54	8	13	4-60	31	48	11-41	20	30	20-61	4	0	3-76	31	6	8-36
ELLIS HOSP SCHENECTADY NY 12308	NY-100	2923	11	9-16	235	29	20-36	112	21	20-38	74	9	9-29	146	23	17-32	135	30	30-48	37	14	8-37	237	18	14-27

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
COMMUNITY GEN HOSP OF SULL HARRIS NY 12742	9	0	6-63	15	20	17-65	32	6	3-26	13	0	0-97	143	6	2-11	58	5	2-18	6	0	0-100	155	4	2-10	59	3	0-12
COMMUNITY GEN HOSP-GROVER CALLICOON NY 12723	.	.		4	50	9-84	1	0	0-100	.	.		38	3	1-19	7	0	0-66	.	.		30	7	1-21	4	0	0-95
COMMUNITY HOSP STAMFORO NY 12167	2	0	2-90	1	0	2-98	.	.			.		26	12	2-26	12	8	1-42	1	0	0-100	28	7	1-23	8	0	0-90
COMMUNITY HOSP AT GLEN COV GLEN COVE NY 11542	20	35	9-51	22	32	19-59	61	5	4-21	22	5	0-79	208	2	3-10	80	6	2-15	15	0	0-80	160	4	2-10	91	2	0-8
COMMUNITY HOSP BROOKLYN BROOKLYN NY 11229	22	41	13-55	24	46	20-60	36	14	4-27	27	0	0-37	182	7	2-10	101	6	3-15	9	0	0-100	173	2	3-10	55	0	0-12
COMMUNITY HOSP OF SCHOHARI COBLESKILL NY 12043	6	33	4-69	12	42	14-66	19	11	1-31		.		50	4	1-16	26	4	0-26	4	0	0-100	45	0	1-16	16	6	0-36
COMMUNITY HOSP OF WESTERN SMITHTOWN NY 11787	24	29	12-53	35	51	20-54	81	2	5-20	119	0	0-6	174	6	3-11	103	6	3-15	17	0	0-55	159	3	2-10	67	3	0-11
COMMUNITY MEMORIAL HOSP HAMILTON NY 13346	2	100	4-93	4	25	3-76	12	8	1-42	.	.		50	6	1-16	34	3	1-21	5	0	0-100	34	9	1-19	32	0	0-25
CONEY ISLANO HOSP BROOKLYN NY 11235	16	6	6-51	60	67	29-57	73	14	5-21	17	0	0-90	175	13	3-10	124	7	3-14	17	0	0-74	316	5	3-9	58	3	0-12
CORNING HOSP CORNING NY 14830	14	29	10-59	6	67	9-76	32	6	3-27	45	0	0-21	126	4	2-11	43	7	1-19	4	0	0-100	100	4	2-12	59	2	0-12
CORTLANO MEMORIAL HOSP CORTLANO NY 13045	11	18	8-61	2	50	4-92	43	9	4-24	18	0	0-78	136	7	3-12	61	5	2-18	21	0	0-94	132	6	3-11	55	5	0-13
CROUSE-IRVING MEMORIAL HOS SYRACUSE NY 13210	28	25	9-47	17	29	18-63	136	6	5-17	216	0	0-3	299	5	3-9	138	3	2-12	34	0	0-46	313	6	2-8	206	1	0-5
CUBA MEMORIAL HOSP CUBA NY 14727	.	.		2	0	2-90	9	11	2-51	.	.		35	0	1-19	21	0	0-29	2	0	0-100	40	10	1-18	15	7	0-47
OEEPOALE GENERAL HOSP LITTLE NECK NY 11362	8	50	9-70	13	38	18-68	31	10	2-24	303	0	0-3	193	7	2-9	118	4	1-12	10	0	0-97	111	2	2-11	79	1	0-10
OEGRAFF MEM HOSP NORTH TONAWANOA NY 14120	5	40	13-85	6	17	9-75	46	7	4-24	33	0	0-57	181	6	3-11	66	3	1-15	22	0	0-93	137	4	2-10	86	3	0-9
OELAWARE VALLEY HOSP INC WALTON NY 13856	2	0	2-91	5	60	13-84	6	17	1-63	.	.		43	2	2-18	8	0	0-63	1	0	0-100	27	7	1-23	23	4	0-28
DOBBS FERRY HOSP DOBBS FERRY NY 10522	1	100	2-99	2	0	3-91	10	10	2-49	20	0	0-78	29	10	1-23	13	0	1-40	.	.		25	4	1-24	14	0	0-60
DOCTORS HOSP NEW YORK NY 10028	13	23	11-62	22	41	23-64	21	10	3-34	23	0	0-82	259	4	3-10	106	2	2-13	20	0	0-79	116	2	2-11	91	0	0-8
OOCTORS HOSP OF STATEN ISL STATEN ISLANO NY 10304	10	30	10-66	17	47	20-66	20	5	5-37	26	0	0-82	156	6	2-10	41	2	1-19	5	0	0-97	101	0	2-11	51	0	0-13
E J NOBLE-ALEXANORIA BAY ALEXANORIA BAY NY 13607	2	0	0-96	2	100	5-93	.	.		.	.		36	3	1-19	7	29	1-57	.	.		20	0	0-29	8	0	0-65
E J NOBLE-GOUVERNEUR GOUVERNEUR NY 13642	1	0	1-97	1	100	2-98	.	.		.	.		27	0	1-23	2	0	0-96	2	0	0-100	30	3	1-21	8	0	0-91
EASTERN LONG ISLANO HOSP GREENPORT NY 11944	3	0	2-83	6	17	10-76	28	4	3-28	.	.		102	11	2-12	29	7	1-24	3	0	0-99	56	4	2-16	29	3	0-26
ELIZABETH A HORTON MEMORIA MIOOLETOWN NY 10940	16	25	11-58	25	28	24-63	61	8	4-20	19	0	0-95	197	6	3-10	83	0	1-14	16	0	0-90	236	5	2-8	143	1	0-6
ELIZABETHTOWN COMMUNITY HO ELIZABETHTOWN NY 12932	5	40	7-78	2	0	2-90	2	0	0-90	1	0	0-100	25	20	1-26	8	0	1-53		.		30	0	1-21	13	15	1-39
ELLENVILLE COMMUNITY HOSP ELLENVILLE NY 12428	4	0	0-78	.	.		8	13	0-55	.	.		41	10	1-18	10	10	0-51	.	.		58	2	1-14	10	10	0-54
ELLIS HOSP SCHENECTAOY NY 12308	28	25	14-53	24	42	17-56	74	12	4-19	65	0	0-20	242	4	2-9	125	6	1-12	16	0	0-84	243	2	2-8	221	1	0-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EMMA LAING STEVENS HOSP GRANVILLE NY 12832	NY-101*	101	22	12-28	6	67	8-74	8	38	8-66	.	.		13	38	8-54	7	43	13-76	4	25	2-76	13	38	9-55
ERIE CO MED CTR BUFFALO NY 14215	NY-102	2413	11	7-14	119	28	18-37	55	25	17-41	48	21	8-32	105	17	14-31	79	41	26-48	51	8	9-35	157	24	13-28
F F THOMPSON HOSP CANANDAIGUA NY 14424	NY-103	1026	13	9-16	87	32	16-37	38	34	15-44	35	20	7-34	50	30	13-37	44	39	25-54	16	13	3-41	104	20	13-30
FAXTON HOSP UTICA NY 13502	NY-104*	1556	16	12-19	189	21	18-35	85	32	19-39	28	18	7-37	110	32	15-32	73	45	30-54	59	19	12-37	156	22	14-29
FLATBUSH GEN HOSP BROOKLYN NY 11203	NY-105*	62	13	5-22	6	0	3-66	1	0	1-97	2	0	0-91	1	100	0-97	1	0	1-97	5	40	6-75	3	33	1-81
FLUSHING HOSP MEDICAL CEN FLUSHING NY 11355	NY-106*	3177	16	12-19	288	22	18-33	182	27	23-38	61	26	13-36	240	26	18-30	173	38	32-49	47	23	11-37	286	26	18-30
FRANKLIN GENERAL HOSP VALLEY STREAM NY 11580	NY-107*	2513	13	11-17	234	23	19-34	137	26	23-40	32	22	7-36	202	23	18-31	130	43	29-48	34	18	8-38	213	16	14-27
GENERAL HOSP OF SARANAC LA SARANAC LAKE NY 12983	NY-108*	916	10	8-15	66	24	16-40	23	17	13-49	13	38	4-47	38	24	13-41	37	32	24-55	9	22	5-58	81	19	11-29
GENESEE HOSP ROCHESTER NY 14607	NY-109*	2965	11	9-16	259	24	17-32	119	30	20-38	53	9	11-35	135	24	18-34	140	36	31-50	51	18	14-40	202	21	14-28
GENESEE MEMORIAL HOSP BATAVIA NY 14020	NY-110*	718	11	11-19	43	35	18-47	23	22	13-49	16	25	6-47	76	20	15-35	44	30	27-57	21	24	6-42	77	9	12-32
GENEVA GEN HOSP GENEVA NY 14456	NY-111	970	12	9-16	99	31	15-35	35	29	14-43	11	27	4-51	60	25	15-37	49	35	26-54	18	11	5-44	81	12	10-28
GLENS FALLS HOSPITAL GLENS FALLS NY 12801	NY-112*	3551	10	9-15	319	18	19-33	114	24	20-38	68	21	9-30	206	23	16-29	143	34	29-47	54	30	11-36	250	15	13-26
GOOD SAMARITAN HOSPITAL SUFFERN NY 10901	NY-113*	2502	13	10-16	162	30	18-36	110	34	21-39	63	19	10-32	125	25	16-32	79	25	30-53	48	19	11-37	214	20	16-30
GOOD SAMARITAN HOSPITAL WEST ISLIP NY 11795	NY-114*	3459	15	10-17	337	34	19-34	148	32	22-39	86	23	12-32	283	25	17-28	150	35	29-47	71	15	9-31	265	18	14-26
GOWANDA PHYCHIATRIC CTR HELMUTH NY 14079	NY-115*	37	11	1-21	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
HARLEM HOSP CTR NEW YORK NY 10037	NY-116	1526	19	9-15	100	35	18-38	90	41	18-38	23	22	6-39	117	26	13-28	41	56	22-52	53	21	7-31	137	25	11-27
HEMPSTEAD GEN HOSP HEMPSTEAD NY 11550	NY-117*	1542	12	9-16	84	29	20-42	72	22	19-41	38	8	9-36	63	27	13-34	40	38	23-53	52	17	8-33	117	23	15-32
HIGHLAND HOSP BEACON NY 12508	NY-118*	586	12	9-17	35	29	15-47	24	38	15-51	14	29	6-49	42	19	12-37	17	24	17-60	32	19	7-37	50	24	12-37
HIGHLAND HOSPITAL ROCHESTER NY 14620	NY-119	1621	15	11-18	169	23	17-34	73	27	20-42	56	25	12-36	88	25	17-36	83	36	31-53	44	32	13-41	127	29	14-31
HIP HOSP OF LONG ISLAND IN SYOSSET NY 11791	NY-120*	1143	13	9-16	125	26	15-34	40	23	17-45	23	22	7-40	64	20	15-37	43	49	25-55	19	32	6-44	79	20	12-31
HOSPITAL FOR SPECIAL SURGE NEW YORK NY 10021	NY-121	1092	1	0-9	6	33	4-67	.	.		.	.		.	.		.	.		.	.		3	0	2-82
HOSPITAL-THE SIDNEY NY 13838	NY-122*	434	13	9-18	22	32	12-50	17	35	15-58	10	10	5-56	32	19	12-42	18	33	20-63	16	6	4-43	49	22	12-36
HOUSE OF THE GOOD SAMARITA WATERTOWN NY 13601	NY-123*	1461	11	9-16	163	23	19-37	75	29	19-40	19	21	5-40	81	21	14-33	43	44	24-54	12	8	3-48	120	18	13-29
HUDSON RIVER PC POUGHKEEPSIE NY 12601	NY-124*	61	8	1-16	.	.		.	.		.	.		.	.		.	.		.	.			.	
HUNTINGTON HOSP HUNTINGTON NY 11743	NY-125	3374	13	10-16	333	27	19-33	156	26	20-36	54	15	12-36	186	28	19-32	120	35	30-50	87	28	12-33	219	20	16-30
INTER COMM MEMORIAL HOSP NEWFANE NY 14108	NY-126*	636	14	10-18	34	38	16-48	22	41	14-52	22	32	7-42	39	28	13-40	25	20	19-56	32	16	9-39	63	21	13-36

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																				
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EMMA LAING STEVENS HOSP GRANVILLE NY 12832	.	.		2	0	3-91	.	.		.	.		8	13	2-54	.	.		.	.		4	0	0-93	3	0	0-96
ERIE CO MEO CTR BUFFALO NY 14215	46	22	8-40	36	31	24-58	42	14	3-23	196	2	0-4	119	14	3-13	78	6	3-17	6	0	0-100	281	5	2-7	55	0	0-15
F F THOMPSON HOSP CANANDAIGUA NY 14424	10	30	7-62	6	0	8-74	23	4	3-32	22	0	0-75	122	5	2-11	50	0	1-18	8	0	0-100	62	5	2-15	75	4	0-10
FAXTON HOSP UTICA NY 13502	10	30	8-63	19	42	20-64	4	0	0-78	34	3	0-50	188	6	3-10	56	4	1-16	14	0	0-98	83	4	1-12	24	0	0-28
FLATBUSH GEN HOSP BROOKLYN NY 11203	.	.		.	.		.	.		.	.		10	0	0-48	2	0	0-100	.	.		3	33	0-95	4	0	0-100
FLUSHING HOSP MEOICAL CEN FLUSHING NY 11355	20	30	15-59	70	37	25-52	145	7	5-16	107	0	0-9	283	6	4-11	179	11	3-13	22	5	0-79	253	7	3-8	96	5	1-9
FRANKLIN GENERAL HOSP VALLEY STREAM NY 11580	25	24	13-54	16	50	17-63	64	9	4-20	42	0	0-26	276	5	3-10	125	4	2-13	11	0	0-98	213	3	3-9	126	0	1-8
GENERAL HOSP OF SARANAC LA SARANAC LAKE NY 12983	6	0	3-68	3	0	6-87	30	13	3-28	9	0	0-95	118	3	2-11	47	0	1-18	13	0	0-61	59	3	2-15	80	3	1-10
GENESEE HOSP ROCHESTER NY 14607	21	14	11-54	21	29	15-56	113	7	5-18	146	0	0-6	289	3	4-10	96	2	1-13	37	0	0-17	233	3	2-8	201	1	0-5
GENESEE MEMORIAL HOSP BATAVIA NY 14020	3	0	3-84	2	50	5-94	16	0	1-36	14	0	0-94	91	4	2-12	44	7	1-19	4	0	0-100	76	1	1-12	20	5	0-34
GENEVA GEN HOSP GENEVA NY 14456	7	43	8-71	2	0	2-91	47	11	3-22	15	0	0-90	107	2	1-10	41	2	1-19	12	0	0-87	59	7	1-14	96	0	0-8
GLENS FALLS HOSPITAL GLENS FALLS NY 12801	28	32	11-50	25	24	18-57	109	6	4-16	214	1	0-4	377	3	3-9	148	5	2-12	42	0	0-25	226	4	3-9	211	0	0-5
GOOO SAMARITAN HOSPITAL SUFFERN NY 10901	19	16	10-53	23	30	24-64	66	9	3-19	37	3	0-46	294	7	3-10	128	4	1-12	14	0	0-74	239	4	3-9	105	3	0-8
GOOO SAMARITAN HOSPITAL WEST ISLIP NY 11795	26	19	11-50	27	37	20-58	84	6	4-19	75	0	0-14	410	6	3-8	129	4	2-13	25	0	0-62	323	5	2-8	124	2	0-7
GOWANDA PHYCHIATRIC CTR HELMUTH NY 14079	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.			.	
HARLEM HOSP CTR NEW YORK NY 10037	12	50	3-52	13	69	17-67	26	8	1-26	45	0	0-29	101	13	2-12	58	22	2-18	6	0	0-100	139	11	2-10	31	3	0-21
HEMPSTEAD GEN HOSP HEMPSTEAO NY 11550	6	50	5-70	37	35	23-57	35	14	3-26	206	0	0-4	103	7	2-12	47	4	2-19	2	0	0-100	134	4	3-11	57	0	0-12
HIGHLANO HOSP BEACON NY 12508	7	14	6-69	11	36	10-62	14	14	2-41	24	0	0-77	59	5	2-15	15	0	0-38	7	0	0-96	54	0	1-15	15	0	0-40
HIGHLANO HOSPITAL ROCHESTER NY 14620	11	27	9-63	10	20	14-69	73	10	4-18	5	0	0-99	142	3	3-12	54	13	2-18	19	0	0-99	99	8	2-12	119	1	0-7
HIP HOSP OF LONG ISLAND IN SYOSSET NY 11791	5	40	2-71	13	54	21-72	29	10	3-27	64	0	0-14	162	4	2-10	64	3	1-15	13	0	0-90	81	5	2-12	38	0	0-19
HOSPITAL FOR SPECIAL SURGE NEW YORK NY 10021	4	0	1-76	.	.		27	0	2-26	.	.		1	0	0-100	1	0	0-100	.	.		.	.		814	0	0-3
HOSPITAL-THE SIONEY NY 13838	.	.		2	0	1-89	6	50	1-62	.	.		68	6	2-14	18	6	0-33	3	0	0-100	43	7	1-17	9	0	0-68
HOUSE OF THE GOOO SAMARITA WATERTOWN NY 13601	6	0	5-71	6	17	7-72	69	4	4-19	32	0	0-63	149	8	2-11	82	0	1-13	9	0	0-100	64	6	2-14	138	4	0-6
HUDSON RIVER PC POUGHKEEPSIE NY 12601	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
HUNTINGTON HOSP HUNTINGTON NY 11743	18	39	9-53	22	41	22-63	119	13	5-18	196	0	0-4	373	5	4-10	118	4	2-13	28	0	0-66	254	7	3-9	182	0	1-6
INTER COMM MEMORIAL HOSP NEWFANE NY 14108	12	25	8-60	2	50	3-91	13	23	4-45	3	0	0-100	65	2	1-13	38	5	1-20	3	0	0-100	59	5	2-15	19	5	0-39

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
HOSPITALS Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
INTERFAITH MEDICAL CTR BROOKLYN NY 11238	NY-127	1753	16	10-16	132	27	18-37	74	27	17-38	52	17	9-33	146	23	16-31	32	31	24-58	43	35	12-41	195	33	15-29
IRA DAVENPORT MEMORIAL HOS BATH NY 14810	NY-128*	481	11	8-16	23	17	11-48	18	28	12-52	8	38	2-56	51	22	12-35	16	56	18-63	13	15	4-47	47	6	8-32
JAMAICA HOSPITAL JAMAICA NY 11418	NY-129	1552	20	13-20	112	30	20-40	117	33	23-42	37	22	10-38	166	31	17-31	92	46	29-51	42	31	10-37	117	26	15-32
JAMESTOWN GENERAL HOSP JAMESTOWN NY 14701	NY-130*	1136	9	8-15	36	28	17-48	31	16	16-48	25	28	10-45	75	16	14-34	36	53	23-55	37	16	7-36	120	16	14-31
JOHN T MATHER MEMORIAL HOS PORT JEFFERSON NY 11777	NY-131	1792	14	10-17	134	22	15-33	76	26	19-40	31	26	8-37	130	25	16-31	83	43	28-50	53	15	13-39	149	22	13-28
JOHNSTOWN HOSP JOHNSTOWN NY 12095	NY-132*	415	11	9-18	24	13	8-41	12	17	12-61	13	23	7-53	31	29	12-42	15	27	16-62	22	14	8-44	38	21	10-37
JONES MEM HOSP WELLSVILLE NY 14895	NY-133*	929	11	8-15	59	44	16-41	22	41	15-53	21	14	4-36	40	18	13-40	22	45	20-60	20	10	4-40	129	12	13-29
JULIA BUTTERFIELD HOSP COLD SPRING NY 10516	NY-134*	242	8	7-17	17	47	12-55	6	0	6-71	3	0	1-81	11	0	6-53	8	25	14-74	8	13	9-67	22	9	5-37
KENMORE MERCY HOSP KENMORE NY 14217	NY-135*	2734	13	9-15	290	29	17-32	127	30	20-37	49	24	7-30	157	29	15-30	143	41	28-46	34	12	8-37	200	16	13-26
KINGS CO HOSP CENTER BROOKLYN NY 11203	NY-136	1402	17	8-15	97	32	18-39	83	36	16-36	23	13	4-36	64	14	11-31	49	57	26-54	26	23	4-35	132	27	10-26
KINGS HIGHWAY HOSPITAL BROOKLYN NY 11234	NY-137*	3154	11	10-16	261	23	17-32	128	19	20-37	51	25	8-32	213	21	17-30	174	30	29-46	89	24	14-36	205	19	14-28
KINGSBROOK JEWISH MEDICAL BROOKLYN NY 11203	NY-138	2246	19	12-19	135	31	20-39	43	28	18-46	74	24	12-34	87	30	17-36	43	47	32-62	55	33	11-37	397	35	21-33
KINGSTON HOSP KINGSTON NY 12401	NY-139*	1468	13	10-17	137	29	20-39	76	25	20-41	34	6	8-37	63	29	14-36	66	36	28-53	19	16	8-46	128	16	11-27
LAFAYETTE GENERAL HOSP BUFFALO NY 14213	NY-140*	35	9	2-24	1	100	1-97	1	0	0-97	.	.		6	33	3-64	.	.		.	.		3	0	0-84
LAGUARDIA HOSP FOREST HILLS NY 11375	NY-141*	1727	13	10-17	234	28	16-32	73	18	19-41	40	23	9-35	79	25	14-34	79	24	26-49	48	23	12-39	129	22	14-30
LAKE SHORE HOSPITAL IRVING NY 14081	NY-142	442	16	9-18	25	32	17-54	21	52	16-55	14	7	5-47	32	25	11-41	12	42	18-70	16	19	3-41	41	27	10-35
LAKESIDE MEM HOSP BROCKPORT NY 14420	NY-143*	490	12	8-16	32	13	9-39	17	29	13-55	5	40	2-69	29	14	11-42	21	43	21-61	6	33	2-64	55	22	12-34
LAWRENCE HOSP BRONXVILLE NY 10708	NY-144	2642	11	10-17	189	18	17-34	118	25	22-40	84	20	12-32	154	19	18-32	141	26	29-47	80	38	16-39	163	19	15-30
LENOX HILL HOSP NEW YORK NY 10021	NY-145*	4848	7	8-15	540	20	19-32	155	21	21-37	91	7	8-27	180	13	17-30	145	23	30-47	65	17	10-33	313	12	16-28
LEONARD HOSP TROY NY 12182	NY-146*	1108	11	10-17	81	23	16-38	34	24	18-49	12	8	2-46	80	26	14-33	47	28	22-50	27	15	7-39	143	18	14-30
LEWIS CO GENERAL HOSP LOWVILLE NY 13367	NY-147*	487	10	12-21	21	48	20-61	13	15	14-62	4	0	1-74	38	11	15-43	19	11	16-58	4	0	1-75	93	19	17-36
LINCOLN MED MENTAL HLTH C BRONX NY 10454	NY-148	1167	17	10-17	67	31	18-42	49	39	15-40	26	19	5-36	81	21	14-33	98	57	26-47	28	21	9-42	150	15	9-23
LITTLE FALLS HOSP LITTLE FALLS NY 13365	NY-149	940	12	10-17	65	48	19-43	33	42	18-50	11	18	7-56	62	23	13-35	30	33	23-57	34	15	7-36	83	13	13-32
LOCKPORT MEM HOSP LOCKPORT NY 14094	NY-150*	1178	12	10-18	83	25	18-40	61	25	20-44	25	20	7-39	75	28	16-36	53	40	26-53	38	21	11-41	111	16	14-31
LOEB CENTER FOR NURSING R BRONX NY 10467	NY-151*	175	5	8-20	5	0	7-77	1	0	0-97	.	.		2	0	3-90	7	0	12-75	1	0	2-98	4	25	1-74
LONG BEACH MEM HOSP LONG BEACH NY 11561	NY-152	1861	17	14-20	105	34	19-39	64	36	22-46	52	12	8-31	169	31	20-35	105	33	33-54	30	30	10-42	199	24	20-35

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
INTERFAITH MEDICAL CTR BROOKLYN NY 11238	26	31	7-45	21	38	16-56	28	18	3-28	54	0	0-24	121	11	2-12	130	5	2-13	11	0	0-98	137	4	2-10	48	0	0-16
IRA DAVENPORT MEMORIAL HOS BATH NY 14810	4	75	3-77	2	0	4-92	11	9	1-45	12	0	0-99	47	9	1-16	35	3	0-21	1	0	0-100	40	3	1-18	27	0	0-28
JAMAICA HOSPITAL JAMAICA NY 11418	4	50	6-82	18	61	18-62	52	12	5-24	1	0	0-100	148	7	3-12	71	4	2-15	14	0	0-76	175	9	3-10	39	8	0-17
JAMESTOWN GENERAL HOSP JAMESTOWN NY 14701	7	29	4-65	7	0	6-67	32	3	4-29	148	1	0-5	103	6	2-13	37	3	2-23	2	0	0-100	72	1	2-13	54	2	0-13
JOHN T MATHER MEMORIAL HOS PORT JEFFERSON NY 11777	22	36	9-51	31	48	23-59	61	11	4-21	43	0	0-27	179	4	2-10	63	8	1-15	5	0	0-100	123	5	2-10	81	2	0-9
JOHNSTOWN HOSP JOHNSTOWN NY 12095	2	0	2-90	3	67	4-84	6	17	1-62	6	0	0-100	51	4	2-18	11	0	0-46	4	0	0-97	50	2	1-16	14	0	0-60
JONES MEM HOSP WELLSVILLE NY 14895	9	33	10-68	7	14	14-77	16	13	1-36	39	0	0-40	121	3	2-10	30	0	1-23	4	0	0-100	86	3	2-12	27	0	0-27
JULIA BUTTERFIELD HOSP COLD SPRING NY 10516	2	50	3-92	4	25	5-80	3	0	0-86	.	.		22	0	1-27	18	0	0-34	3	0	0-100	43	0	1-16	11	0	0-76
KENMORE MERCY HOSP KENMORE NY 14217	13	31	6-54	7	29	8-69	97	9	4-18	137	1	0-7	304	6	3-9	111	2	1-12	25	4	0-75	210	6	2-8	182	2	0-6
KINGS CO HOSP CENTER BROOKLYN NY 11203	27	44	3-40	12	83	14-66	38	24	4-26	36	0	0-26	78	14	2-14	55	2	0-17	12	8	0-100	103	19	1-10	36	0	0-29
KINGS HIGHWAY HOSPITAL BROOKLYN NY 11234	29	31	12-50	12	42	15-67	125	8	5-17	50	0	0-28	333	5	3-9	242	4	1-10	37	0	0-47	435	3	3-7	103	4	0-8
KINGSBROOK JEWISH MEDICAL BROOKLYN NY 11203	17	29	12-58	28	36	21-58	40	8	5-27	63	2	0-13	153	9	4-13	160	9	3-14	9	0	0-68	159	6	3-11	32	3	0-23
KINGSTON HOSP KINGSTON NY 12401	14	43	13-63	14	29	14-62	43	2	2-21	43	0	0-41	185	8	3-10	83	5	1-14	9	0	0-100	111	5	2-11	60	0	0-12
LAFAYETTE GENERAL HOSP BUFFALO NY 14213	.	.		1	0	1-97	2	0	0-97	.	.		3	0	0-96	1	0	0-100	.	.		2	0	0-100	4	0	0-98
LAGUARDIA HOSP FOREST HILLS NY 11375	11	18	8-61	15	40	18-65	43	5	4-24	61	0	0-18	211	7	3-10	150	3	2-11	20	0	0-98	97	3	2-12	58	0	0-12
LAKE SHORE HOSPITAL IRVING NY 14081	2	50	2-90	5	80	9-80	12	25	2-44	6	0	0-89	53	9	1-15	22	5	1-28	2	0	0-100	29	3	1-22	19	0	0-52
LAKESIDE MEM HOSP BROCKPORT NY 14420	5	40	6-76	3	33	5-86	7	14	0-59	3	0	0-100	74	7	1-12	42	12	2-20	9	0	0-98	36	6	1-19	23	0	0-26
LAWRENCE HOSP BRONXVILLE NY 10708	11	27	7-59	29	41	19-55	107	12	4-17	123	0	0-6	233	6	3-11	115	1	1-12	15	7	0-77	213	2	3-9	202	0	0-5
LENOX HILL HOSP NEW YORK NY 10021	20	20	9-52	32	31	25-61	152	5	4-15	507	0	0-2	436	3	3-8	220	2	1-10	38	0	0-33	433	4	3-8	344	1	1-4
LEONARD HOSP TROY NY 12182	7	29	4-66	8	38	18-79	26	23	3-30	5	0	0-100	124	4	2-11	47	2	2-20	9	0	0-100	107	3	2-12	41	5	0-16
LEWIS CO GENERAL HOSP LOWVILLE NY 13367	2	0	2-90	6	17	13-80	2	50	0-96	.	.		58	3	2-17	11	9	2-46	2	0	0-100	49	4	2-17	21	5	0-35
LINCOLN MED MENTAL HLTH C BRONX NY 10454	9	22	4-60	5	60	7-77	20	10	2-31	5	0	0-100	81	7	2-14	54	7	1-17	9	11	0-97	79	5	2-14	31	6	0-27
LITTLE FALLS HOSP LITTLE FALLS NY 13365	8	25	4-62	15	27	14-61	20	10	3-35	3	0	0-100	108	7	2-11	31	3	1-23	8	0	0-99	79	3	2-12	61	0	0-12
LOCKPORT MEM HOSP LOCKPORT NY 14094	5	40	4-73	6	17	8-74	27	4	3-29	13	0	0-95	125	3	3-12	65	6	1-15	14	0	0-97	145	2	2-10	39	0	0-17
LOEB CENTER FOR NURSING R BRONX NY 10467	.	.		.	.		3	0	0-91	1	0	0-100	.	.		3	33	0-84	.	.		7	14	0-64	2	0	0-100
LONG BEACH MEM HOSP LONG BEACH NY 11561	23	48	16-58	53	47	27-56	64	11	6-24	58	0	0-15	148	5	3-12	102	11	3-16	6	0	0-100	184	2	3-10	65	2	1-13

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
LONG ISLAND COLLEGE HOSP BROOKLYN NY 11201	NY-153*	3238	13	10-16	294	24	18-33	100	33	19-38	78	12	9-29	156	18	15-29	92	46	30-51	48	25	7-32	329	28	17-29
LONG ISLAND JEWISH HILLSID NEW HYDE PARK NY 11040	NY-154*	4340	11	9-15	510	18	17-31	153	30	19-35	102	20	12-30	153	22	15-29	210	30	30-46	44	18	12-39	222	27	14-27
LONG ISLAND JEWISH-HILLSID NEW HYDE PARK NY 11040	NY-155*	1	0	0-100	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
LUTHERAN MEDICAL CENTER BROOKLYN NY 11220	NY-156*	2975	11	10-17	260	21	19-34	121	18	21-39	76	17	13-34	191	20	16-29	110	34	30-50	93	16	13-34	226	19	15-28
MAIMONIDES MEDICAL CENTER BROOKLYN NY 11219	NY-157*	5170	11	10-16	574	20	18-31	171	23	22-37	116	13	13-31	257	19	19-31	252	27	31-46	55	20	10-35	361	21	18-29
MANHATTAN EYE EAR THROAT NEW YORK NY 10021	NY-158	3071	0	0-22	23	0	8-43	.	.		.	.		.	.		.	.		1	0	0-99	2	0	0-92
MARGARETVILLE MEM HOSP MARGARETVILLE NY 12455	NY-159*	278	14	10-20	15	60	12-58	8	25	7-64	10	0	4-53	29	17	12-43	18	33	18-60	13	15	4-49	29	10	8-38
MARY MCCLELLAN HOSP CAMBRIDGE NY 12816	NY-160*	537	6	7-15	36	33	12-42	12	17	10-58	12	8	5-51	26	23	11-44	18	17	22-65	3	0	0-85	49	6	9-32
MASSAPEQUA GENERAL HOSP SEAFORD NY 11783	NY-161*	925	12	9-16	77	25	14-36	27	11	15-50	22	9	5-39	62	19	13-34	36	58	26-58	6	0	5-68	82	13	13-32
MASSENA MEMORIAL HOSP MASSENA NY 13662	NY-162*	545	18	9-18	35	43	18-50	23	43	14-50	5	80	9-79	40	38	12-38	30	47	20-54	8	38	5-62	64	28	12-34
MEDICAL ARTS CTR HOS NEW YORK NY 10019	NY-163*	342	1	2-10	30	10	11-42	1	0	1-97	1	0	0-98	1	0	0-97	1	0	1-97	1	0	0-97	2	0	1-89
MEDINA MEMORIAL HOSP MEDINA NY 14103	NY-164*	592	12	9-17	37	16	15-45	24	33	13-49	10	30	6-56	36	22	12-40	22	45	18-57	12	8	4-49	60	23	10-32
MEMORIAL HOSP ALBANY NY 12204	NY-165*	1958	12	10-16	148	26	18-36	72	15	17-39	58	10	7-29	149	25	16-30	63	33	27-52	46	13	9-35	184	23	14-28
MEMORIAL HOSP NEW YORK NY 10021	NY-166*	2549	12	12-19	1324	13	16-28	7	43	8-69	43	26	7-32	8	25	5-60	1	100	1-97	25	56	14-50	85	22	11-29
MEMORIAL HOSP OF GREENE CT CATSKILL NY 12414	NY-167	767	15	10-17	39	21	11-40	28	21	15-49	18	17	8-47	50	26	12-35	41	37	24-54	33	21	6-35	96	26	12-30
MERCY COMMUNITY HOSP PORT JERVIS NY 12771	NY-168*	1037	11	9-16	82	26	15-37	35	31	17-47	15	33	5-46	72	17	15-35	37	30	24-56	12	25	3-48	96	17	12-30
MERCY HOSP BUFFALO NY 14220	NY-169	3198	12	9-16	229	31	18-34	147	33	21-37	61	15	11-34	170	19	16-30	163	35	31-48	48	19	8-34	169	19	13-28
MERCY HOSP ROCKVILLE CENTRE NY 11570	NY-170*	2689	13	10-16	259	32	19-35	88	24	19-39	63	16	12-34	123	22	16-32	103	40	29-49	91	31	15-37	162	18	13-27
MERCY HOSP OF WATERTOWN WATERTOWN NY 13601	NY-171*	967	10	8-15	68	25	16-40	26	31	14-48	17	29	7-46	58	22	12-33	29	31	18-51	24	21	9-44	95	14	10-27
METHODIST HOSP BROOKLYN NY 11215	NY-172*	3038	10	10-16	223	18	18-34	91	27	21-41	115	14	11-29	158	22	17-31	103	35	30-51	109	17	15-35	281	17	17-29
METROPOLITAN HOSP CENTER NEW YORK NY 10029	NY-173	1178	18	9-17	57	25	16-42	45	44	17-43	25	36	8-41	69	20	15-36	68	54	26-50	23	22	4-37	125	26	13-29
MID-ISLAND HOSP BETHPAGE NY 11714	NY-174*	1814	12	10-17	171	25	20-37	76	38	19-41	42	7	8-33	127	28	17-33	95	43	30-51	32	25	10-42	141	15	13-28
MIDDLETOWN PSYCH CENTER M/ MIDDLETOWN NY 10940	NY-175	96	10	1-13	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
MILLARD FILLMORE HOSP BUFFALO NY 14209	NY-176*	5194	11	9-15	402	22	19-34	195	24	21-35	83	12	13-33	287	21	16-27	216	42	30-45	104	18	9-29	388	19	15-26
MOHAWK VALLEY GEN HOSP ILION NY 13357	NY-177*	831	15	10-17	65	32	14-37	42	31	15-43	19	21	7-44	62	34	14-36	34	41	25-58	10	20	3-52	80	20	13-33
MONTEFIORE HOSP BRONX NY 10467	NY-178	8718	12	11-17	964	21	21-33	275	15	22-35	268	13	14-29	371	16	19-30	350	30	35-48	120	19	14-33	620	25	18-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
LONG ISLAND COLLEGE HDSP BROOKLYN NY 11201	42	21	9-42	48	44	25-56	63	10	3-18	83	0	0-14	253	3	3-10	188	6	3-12	24	0	0-78	261	5	2-8	92	3	0-8
LDNG ISLAND JEWISH HILLSID NEW HYDE PARK NY 11040	37	16	8-43	38	50	23-56	98	8	4-18	119	0	0-7	339	5	3-8	225	3	1-10	30	0	0-65	548	5	3-7	165	1	0-6
LDNG ISLAND JEWISH-HILLSID NEW HYDE PARK NY 11040		.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
LUTHERAN MEDICAL CENTER BROOKLYN NY 11220	25	20	11-51	17	24	15-60	64	11	5-22	18	0	0-89	289	6	3-10	143	2	2-12	27	0	0-38	236	6	2-8	130	2	1-8 0
MAIMONIDES MEDICAL CENTER BROOKLYN NY 11219	40	13	10-44	52	37	27-57	133	7	4-16	146	0	0-6	494	4	3-8	419	1	2-9	35	3	0-70	657	6	3-7	182	2	1-6
MANHATTAN EYE EAR THRDAT NEW YORK NY 10021	1	0	0-100	.	.		.	.		2748	0	0-1	3	0	0-98	.	.		.	.		2	0	0-99	7	0	0-99
MARGARETVILLE MEM HDSP MARGARETVILLE NY 12455	1	0	0-99	2	50	7-95	2	100	0-91	.	.		37	8	2-22	8	13	1-54	2	0	0-100	15	7	0-37	22	0	0-31
MARY MCCLELLAN HDSP CAMBRIDGE NY 12816	3	0	4-86	1	0	1-97	8	0	0-56	1	0	0-100	65	3	2-15	25	4	0-27	6	0	0-91	56	0	1-14	37	0	0-18
MASSAPEQUA GENERAL HDSP SEAFORD NY 11783	5	20	2-71	7	57	9-71	11	9	1-44	1	0	0-100	106	11	3-13	46	4	1-18	7	0	0-100	96	4	1-11	63	0	0-12
MASSENA MEMORIAL HDSP MASSENA NY 13662	5	60	4-73	1	0	0-97	9	11	1-50	10	0	0-98	77	4	1-13	22	5	0-28	1	0	0-100	48	8	1-16	32	3	0-24
MEDICAL ARTS CTR HDS NEW YORK NY 10019	.	.		.	.		1	0	0-100	148	0	0-6	9	0	0-56	32	0	0-41	2	0	0-100	6	0	0-88	35	0	0-24
MEDINA MEMDRIAL HDSP MEDINA NY 14103	6	17	3-68	1	100	1-97	14	7	1-38	12	0	0-99	86	7	2-13	31	0	1-23	5	0	0-100	60	3	2-15	20	5	0-31 0
MEMDRIAL HOSP ALBANY NY 12204	24	4	7-47	16	31	17-63	59	7	3-20	2	0	0-100	219	5	3-10	109	3	1-13	14	0	0-96	131	4	2-10	94	0	0-8
MEMDRIAL HOSP NEW YORK NY 10021	8	38	2-60	35	26	25-59	3	33	0-88	2	50	0-100	106	11	2-12	63	6	1-15	15	0	0-54	19	21	1-30	41	12	1-16
MEMDRIAL HOSP OF GREENE CT CATSKILL NY 12414	1	0	1-97	7	57	11-74	35	9	3-24	11	0	0-93	82	6	2-13	39	5	1-20	5	0	0-100	60	5	1-14	32	3	0-20
MERCY COMMUNITY HDSP PORT JERVIS NY 12771	3	33	3-83	24	42	20-59	25	0	2-28	45	0	0-45	107	2	2-11	44	7	1-18	2	0	0-100	116	5	2-11	38	0	0-18
MERCY HDSP BUFFALD NY 14220	21	24	10-52	29	28	25-62	50	12	4-23	121	2	0-6	346	6	3-9	156	1	2-12	21	5	0-90	273	5	2-8	144	0	1-7
MERCY HDSP ROCKVILLE CENTRE NY 11570	23	30	22-65	30	40	25-61	57	12	5-22	64	3	0-14	306	5	3-9	127	5	2-13	26	0	0-56	158	3	2-9	147	3	0-6
MERCY HDSP DF WATERTDWN WATERTDWN NY 13601	9	22	10-68	4	25	4-78	34	6	4-27	13	0	0-94	107	8	2-12	71	6	1-14	9	0	0-100	64	2	1-13	57	2	0-13
METHODIST HDSP BROOKLYN NY 11215	21	38	10-52	17	18	19-64	57	7	4-22	100	0	0-8	229	5	3-9	135	5	2-13	22	0	0-95	260	3	2-8	86	0	0-9
METROPOLITAN HDSP CENTER NEW YORK NY 10029	15	40	6-52	7	71	12-75	24	17	3-30	17	0	0-80	88	10	2-13	32	22	2-24	7	0	0-100	96	8	2-12	35	0	0-22
MID-ISLAND HDSP BETHPAGE NY 11714	12	42	9-60	16	25	18-64	47	2	3-22	59	0	0-27	193	3	2-9	79	0	1-14	12	0	0-100	179	3	2-9	104	0	0-8
MIDDLETDWN PSYCH CENTER M/ MIDDLETDWN NY 10940	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
MILLARD FILLMDRE HOSP BUFFALO NY 14209	36	22	10-45	25	28	21-60	135	7	4-16	235	0	0-3	559	6	4-9	239	4	2-11	57	0	0-35	498	4	3-7	271	2	1-5
MDHAWK VALLEY GEN HDSP ILIDN NY 13357	18	33	9-53	4	0	4-78	26	8	2-28	1	0	0-100	111	7	2-11	42	2	1-19	13	0	0-92	74	5	2-13	33	0	0-20
MDNTEFIDRE HOSP BRDNX NY 10467	122	19	12-38	69	49	31-58	244	8	6-15	468	0	0-2	682	6	4-9	514	7	3-10	42	0	0-18	982	8	4-7	274	4	1-6

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MOSES LUOINGTON HOSP TICONOEROGA NY 12883	NY-179*	303	12	8-17	14	57	14-62	12	33	8-56	5	0	1-68	14	21	7-50	14	29	17-64	2	0	0-92	44	18	8-31
MOUNT SINAI HOSP NEW YORK NY 10029	NY-180	5645	11	10-16	819	19	20-33	149	19	21-37	142	16	12-28	174	20	16-30	191	21	32-48	53	30	10-36	351	26	18-30
MOUNT VERNON HOSP MOUNT VERNON NY 10550	NY-181*	1754	11	9-16	136	20	18-37	58	21	17-40	44	14	11-38	128	16	17-32	73	32	28-52	33	9	8-38	100	16	14-32
MT ST MARY S HOSP LEWISTON NY 14092	NY-182*	1261	9	8-15	104	19	15-35	45	29	17-44	28	11	9-40	54	19	12-35	35	46	23-55	25	16	6-39	94	7	10-28
MYERS COMMUNITY HOSP SOOUS NY 14551	NY·183*	491	12	9-17	22	32	14-52	21	14	12-49	7	14	4-63	39	15	13-40	20	35	19-60	20	10	6-42	46	20	10-34
NASSAU CO MEO CTR EAST MEAOOW NY 11554	NY-184	2069	22	10-17	100	40	20-41	65	43	18-41	59	39	9-31	97	30	14-32	87	29	29-51	30	37	7-38	299	44	17-30
NATHAN LITTAUER HOSP GLOVERSVILLE NY 12078	NY-185*	1003	12	8-15	86	29	16-38	39	33	17-46	18	22	4-39	39	21	10-36	63	44	24-49	29	14	5-35	67	21	10-30
NEW ROCHELLE HOSP MEOICAL NEW ROCHELLE NY 10802	NY-186	2950	12	10-16	268	22	18-33	149	26	22-38	39	18	8-35	161	22	18-33	107	38	32-52	69	32	12-35	231	18	17-30
NEW YORK EYE ANO EAR INFIR NEW YORK NY 10003	NY-187*	3414	0	0-17	12	17	8-56	.	.		.	.		3	0	1-81	.	.		4	0	1-75	3	0	1-81
NEW YORK HOSP NEW YORK NY 10021	NY-188*	5710	7	7-14	761	12	17-30	138	17	20-36	99	10	10-29	155	21	17-31	135	21	29-48	60	18	8-31	281	16	16-28
NEW YORK INF BEEKMAN OWTN NEW YORK NY 10038	NY-189	1708	13	10-17	122	29	17-37	98	20	18-36	55	13	8-30	70	19	15-35	70	36	29-53	56	23	9-33	205	29	15-29
NEWARK WAYNE COMM HOSP NEWARK NY 14513	NY-190	1152	10	9-16	79	16	16-38	50	20	17-42	22	18	6-39	75	15	14-34	58	29	26-52	20	10	6-42	167	19	12-26
NIAGARA FALLS MEMORIAL MEO NIAGARA FALLS NY 14302	NY-191*	2100	11	9-15	181	28	21-38	79	19	20-41	52	15	9-32	94	30	14-31	85	45	26-48	73	14	10-33	117	14	12-29
NICHOLAS NOYES MEMORIAL HO OANSVILLE NY 14437	NY-192*	825	13	10-17	72	35	15-38	41	37	15-43	24	17	8-41	47	21	14-39	42	40	26-56	14	7	6-50	89	19	12-30
NORTH CENTRAL BRONX HOSP BRONX NY 10467	NY-193	998	18	10-17	28	29	9-41	52	40	17-41	19	32	5-41	66	29	15-36	76	46	29-53	29	14	5-36	122	18	11-26
NORTH GENERAL HOSP NEW YORK NY 10035	NY-194*	514	10	9-17	37	32	13-42	24	29	16-52	16	6	5-45	22	9	9-44	6	33	9-75	6	33	5-69	50	18	15-40
NORTH SHORE UNIV HOSP MANHASSET NY 11030	NY-195*	4726	11	10-16	769	23	19-32	166	20	21-37	150	17	12-28	150	20	17-32	155	43	30-48	46	26	11-38	246	22	18-31
NORTHERN OUTCHESS HOSP RHINEBECK NY 12572	NY-196*	657	16	11-19	60	32	17-42	24	29	14-50	16	31	5-45	44	23	13-38	29	41	21-56	18	6	5-42	72	19	13-34
NORTHERN WESTCHESTER HOSP MOUNT KISCO NY 10549	NY-197*	1834	10	10-17	227	23	18-34	73	22	21-44	43	16	10-36	99	16	16-34	65	35	27-51	50	14	9-35	128	16	14-30
NYACK HOSP NYACK NY 10960	NY-198	2956	13	11-17	191	26	16-32	145	21	21-37	81	16	12-32	142	15	16-31	116	46	29-49	62	16	9-33	390	23	16-28
NYU MEOICAL CENTER-UNIVERS NEW YORK NY 10016	NY-199*	4701	5	8-14	768	10	17-30	108	11	18-36	61	7	8-30	126	13	16-32	91	30	31-52	5	40	2-70	179	12	14-29
OLEAN GENERAL HOSP OLEAN NY 14760	NY-200*	1151	10	9-16	90	18	18-40	38	42	18-48	16	6	6-46	60	25	14-36	42	31	25-54	38	13	8-36	72	10	12-32
ONEIOA CITY HOSP ONEIDA NY 13421	NY-201*	903	12	10-18	76	22	16-38	25	24	13-48	24	17	10-45	55	20	16-40	46	33	25-53	23	17	8-44	79	22	11-30
ORTHOPAEOIC INSTITUTE NEW YORK NY 10003	NY-202*	1012	1	1-8	12	0	7-54	.	.		.	.		1	0	1-97	.	.		1	0	0-99	1	0	0-98
OSWEGO HOSP OSWEGO NY 13126	NY-203*	937	12	9-16	57	33	14-39	26	23	14-48	24	38	12-48	55	29	13-36	34	50	22-54	9	33	4-57	100	17	11-28
OUR LADY OF LOUROES MEMORI BINGHAMTON NY 13905	NY-204*	2858	14	11-17	341	27	18-33	99	26	20-39	61	18	13-36	187	26	18-32	91	37	28-49	49	22	10-36	271	23	16-28

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MOSES LUOINGTON HOSP TICONDEROGA NY 12883	2	0	1-90	2	0	2-90	2	0	0-98	1	0	0-100	34	3	1-20	4	0	0-86	.	.		31	10	1-22	19	0	0-35
MOUNT SINAI HOSP NEW YORK NY 10029	46	15	11-44	42	50	28-60	121	6	6-19	254	0	0-3	527	5	3-9	226	4	3-11	52	0	0-43	558	4	3-7	190	0	0-5 0
MOUNT VERNON HOSP MOUNT VERNON NY 10550	9	33	10-68	14	36	18-67	44	18	4-24	72	1	0-13	159	3	3-11	73	1	1-14	13	0	0-73	233	3	2-9	98	5	0-8
MT ST MARY S HOSP LEWISTON NY 14092	12	25	6-56	22	5	18-58	28	0	2-27	23	0	0-74	150	9	3-12	65	0	1-15	8	0	0-100	125	3	2-10	91	1	1-9
MYERS COMMUNITY HOSP SODUS NY 14551	9	11	3-58	1	100	0-97	9	33	1-50	1	0	0-100	43	7	1-17	25	0	0-29	4	0	0-100	55	5	2-16	15	13	1-35
NASSAU CO MED CTR EAST MEADOW NY 11554	20	35	7-49	56	48	23-51	42	12	2-21	27	0	0-57	113	16	2-12	80	25	3-17	7	0	0-100	214	10	2-8	58	5	0-13
NATHAN LITTAUER HOSP GLOVERSVILLE NY 12078	3	0	2-82	2	50	2-90	28	4	1-25	6	0	0-100	136	4	2-10	69	1	0-15	20	5	0-56	83	4	1-11	81	2	0-9
NEW ROCHELLE HOSP MEOICAL NEW ROCHELLE NY 10802	13	23	5-53	27	52	21-59	92	4	4-18	153	1	0-5	312	8	3-9	179	6	2-11	20	0	0-77	252	3	3-9	119	1	0-7
NEW YORK EYE ANO EAR INFIR NEW YORK NY 10003	.	.		.	.		.	.		3079	0	0-1	2	0	0-97	.	.		.	.		2	0	0-100	2	0	0-100
NEW YORK HOSP NEW YORK NY 10021	60	8	5-35	32	41	26-62	148	9	5-16	549	0	0-2	518	2	3-8	316	3	1-9	95	1	0-13	620	5	3-7	176	0	0-5
NEW YORK INF BEEKMAN OWTN NEW YORK NY 10038	16	25	6-52	14	50	16-64	57	9	4-21	33	0	0-46	156	4	3-11	99	1	1-13	10	0	0-100	167	4	2-10	60	2	1-12 0
NEWARK WAYNE COMM HOSP NEWARK NY 14513	16	31	5-50	5	0	11-82	24	4	1-27	17	6	0-94	138	3	2-10	55	0	1-16	8	0	0-100	71	7	1-12	69	0	0-10
NIAGARA FALLS MEMORIAL MED NIAGARA FALLS NY 14302	20	10	10-53	19	42	19-62	58	7	4-20	104	0	0-8	188	5	2-10	72	7	1-14	10	0	0-100	148	5	2-9	87	2	0-9
NICHOLAS NOYES MEMORIAL HO OANSVILLE NY 14437	4	25	3-78	6	17	5-70	24	0	1-27	29	0	0-61	115	4	2-12	38	0	1-21	11	0	0-58	54	0	1-14	33	3	0-19
NORTH CENTRAL BRONX HOSP BRONX NY 10467	4	25	1-76	16	63	21-68	30	3	3-27	2	0	0-100	66	17	2-15	28	7	2-27	5	20	0-99	77	5	1-12	25	0	0-42
NORTH GENERAL HOSP NEW YORK NY 10035	2	0	1-90	12	50	13-63	4	25	0-75	14	0	0-91	41	7	2-20	29	3	2-26	3	0	0-100	25	0	0-24	39	0	0-27
NORTH SHORE UNIV HOSP MANHASSET NY 11030	41	29	10-44	50	38	29-59	100	4	4-17	102	0	0-8	452	2	3-8	301	2	1-9	65	2	0-27	599	5	3-7	175	2	0-6
NORTHERN OUTCHESS HOSP RHINEBECK NY 12572	4	25	4-79	15	47	22-70	28	7	3-28	10	0	0-98	84	10	3-15	40	8	1-19	8	0	0-98	55	5	1-15	18	0	0-39
NORTHERN WESTCHESTER HOSP MOUNT KISCO NY 10549	16	25	9-55	10	10	14-70	68	12	4-19	39	0	0-30	193	5	3-11	88	1	2-14	17	0	0-97	120	3	2-11	95	2	0-8
NYACK HOSP NYACK NY 10960	27	37	18-58	41	29	24-56	117	8	4-17	34	0	0-40	299	6	4-10	168	8	2-12	14	0	0-85	197	5	2-9	130	2	0-7 0
NYU MEOICAL CENTER-UNIVERS NEW YORK NY 10016	22	9	13-55	9	44	18-77	56	0	5-23	143	0	0-6	373	3	3-9	293	1	1-9	63	0	0-12	689	5	3-7	265	0	0-5
OLEAN GENERAL HOSP OLEAN NY 14760	9	44	9-68	8	13	9-68	45	4	3-22	4	0	0-100	121	4	2-11	66	2	1-15	11	0	0-100	119	4	2-11	64	2	0-11
ONEIDA CITY HOSP ONEIDA NY 13421	9	44	10-68	6	33	11-78	37	14	3-24	4	0	0-100	97	4	3-15	54	2	1-16	11	0	0-97	53	6	1-15	49	4	0-14
ORTHOPAEDIC INSTITUTE NEW YORK NY 10003	.	.		.	.		121	2	4-16	.	.		.	.		.	.		.	.		1	0	0-100	654	1	0-3
OSWEGO HOSP OSWEGO NY 13126	9	33	7-63	10	40	13-68	32	0	2-24	7	0	0-100	125	0	2-11	27	0	0-25	8	0	0-100	76	3	2-13	53	0	0-13
OUR LAOY OF LOUROES MEMORI BINGHAMTON NY 13905	21	33	8-49	19	5	18-61	79	11	4-19	18	0	0-93	303	5	3-9	118	5	2-13	37	0	0-47	175	5	3-10	152	2	1-7

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
OUR LADY OF MERCY BRONX NY 10466	NY-205*	2447	12	12-18	198	25	18-34	150	21	22-39	52	21	11-35	150	11	16-31	116	22	30-50	76	21	10-32	251	24	17-30
OUR LADY OF VICTORY LACKAWANNA NY 14218	NY-206*	2360	14	10-17	158	28	21-39	75	40	18-40	44	20	9-35	199	20	17-30	105	47	29-49	40	13	8-35	224	17	16-29
PARK RIDGE HOSP ROCHESTER NY 14626	NY-207	2000	11	9-15	164	24	16-34	89	17	18-37	28	21	9-40	110	19	16-33	78	38	27-50	35	23	9-39	174	26	14-28
PARKWAY HOSP FOREST HILLS NY 11375	NY-208*	2613	10	9-16	210	21	17-34	92	20	22-42	56	14	8-30	108	17	16-33	96	36	31-52	33	12	7-37	262	24	18-32
PARSONS HOSP FLUSHING NY 11357	NY-209*	585	22	12-20	49	39	16-42	18	39	14-55	13	15	4-48	50	36	13-37	25	68	28-66	11	18	6-56	89	33	17-37
PEEKSKILL HOSP PEEKSKILL NY 10566	NY-210*	1259	12	10-17	103	26	16-36	75	20	18-39	25	8	7-39	104	20	14-31	62	40	27-52	20	10	7-45	89	8	10-28
PELHAM BAY GENERAL HOSP BRONX NY 10461	NY-211*	1205	12	10-17	87	29	18-39	50	14	18-44	29	17	6-35	72	25	15-35	59	49	30-56	35	14	7-36	129	18	15-31
PENINSULA HOSP CENTER FAR ROCKAWAY NY 11691	NY-212*	2114	20	14-20	134	37	20-39	102	27	21-40	49	24	11-36	139	26	17-32	64	45	28-53	32	31	10-41	326	36	20-33
PHELPS MEMORIAL HOSP NORTH TARRYTOWN NY 10591	NY-213*	1730	11	9-16	147	22	17-35	83	31	19-39	50	16	8-31	98	21	16-33	59	31	29-55	41	10	8-36	110	15	13-31
PHYSICIANS HOSP JACKSON HEIGHTS NY 11372	NY-214*	1128	13	10-17	84	35	17-38	35	14	16-46	31	13	7-36	99	20	17-35	53	40	28-55	29	17	6-37	124	19	14-31
PLACID MEMORIAL HOSP LAKE PLACID NY 12946	NY-215*	183	11	8-19	9	56	12-68	9	0	8-63	3	0	1-81	14	43	9-53	1	0	0-97	10	30	4-54	10	10	5-54
PRESBYTERIAN HOSP NEW YORK NY 10032	NY-216	5924	7	7-13	708	17	18-31	202	13	20-34	104	13	10-28	171	18	16-30	127	20	29-48	46	11	8-33	283	15	15-28
PUTNAM COMMUNITY HOSP CARMEL NY 10512	NY-217	1118	12	11-18	76	28	17-40	50	36	18-44	21	19	7-43	52	23	13-36	63	25	26-50	22	32	9-45	130	15	15-31
QUEENS HOSP MED CTR JAMAICA NY 11432	NY-218	1321	17	9-16	73	29	19-42	60	52	18-41	27	26	6-36	80	25	12-31	60	62	26-51	42	24	8-35	116	22	10-26
RICHMOND MEMORIAL HOSP HLT STATEN ISLAND NY 10309	NY-219*	1111	13	10-17	80	23	15-36	35	40	15-45	33	21	10-40	91	14	14-31	40	43	24-54	29	24	10-43	126	22	15-32
ROCHESTER GEN HOSP ROCHESTER NY 14621	NY-220	4080	11	9-15	374	20	16-31	144	22	20-36	105	20	10-28	235	17	16-28	192	29	29-45	67	28	9-32	281	26	16-28
ROCHESTER PSYCHIATRIC CENT ROCHESTER NY 14620	NY-221	59	12	1-16	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
ROCKEFELLER UNIV HOSP NEW YORK NY 10021	NY-222*	30	0	0-25	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
ROME HOSP MURPHY MEM HOSP ROME NY 13440	NY-223*	1620	15	10-17	120	30	17-36	62	29	17-40	31	19	6-35	120	28	15-31	81	47	28-50	50	8	9-34	137	24	13-28
ROOSEVELT HOSP NEW YORK NY 10019	NY-224*	2583	10	9-16	330	17	17-32	74	31	18-39	38	16	7-33	123	19	15-31	84	35	30-53	52	27	10-36	200	17	15-29
ROSWELL PARK MEM INSTITUTE BUFFALO NY 14203	NY-225*	843	13	12-20	328	19	19-34	1	0	1-97	14	21	6-48	2	0	1-89	.	.		11	55	9-60	13	46	13-61
SALAMANCA DIST HOSP SALAMANCA NY 14779	NY-226*	273	12	9-19	8	50	11-70	17	18	13-55	8	25	7-65	12	8	9-56	4	75	8-84	8	0	2-57	47	13	10-34
SAMARITAN HOSP TROY NY 12180	NY-227*	1866	13	11-18	164	30	19-37	73	26	18-39	29	24	9-41	98	24	16-34	76	32	28-52	57	14	13-38	179	20	15-29
SARATOGA HOSP SARATOGA SPRINGS NY 12866	NY-228*	1270	15	10-17	86	33	18-40	49	29	18-44	18	22	7-46	60	22	14-36	56	41	28-55	41	27	9-36	163	28	14-29
SCHUYLER HOSP MONTOUR FALLS NY 14865	NY-229*	368	10	9-18	13	23	9-56	7	43	11-73	6	33	6-70	22	18	10-45	14	43	22-71	16	25	9-52	35	14	10-38
SENECA FALLS HOSP SENECA FALLS NY 13148	NY-230*	112	8	6-20	4	50	3-77	6	33	4-66	2	50	1-89	9	22	5-56	6	17	8-73	.	.		10	10	3-50

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Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																				
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics					
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent			
OUR LADY OF MERCY BRONX NY 10466	16	13	13-61	40	33	22-54	81	6	5-20	76	1	0-12	219	6	4-11	91	8	3-16	17	0	0-66	167	3	3-10	103	1	1-8			
OUR LADY OF VICTORY LACKAWANNA NY 14218	9	33	7-64	23	13	17-56	45	9	3-23	58	0	0-16	266	6	3-9	113	4	2-14	4	0	0-100	214	6	2-8	74	3	0-10			
PARK RIDGE HOSP ROCHESTER NY 14626	6	17	7-73	18	39	18-62	45	13	2-21	157	0	0-5	250	4	3-9	73	1	1-15	13	0	0-97	204	4	2-8	86	0	0-9			
PARKWAY HOSP FOREST HILLS NY 11375	18	17	11-57	28	18	21-58	57	9	4-21	239	1	0-3	304	6	3-10	200	5	2-11	25	0	0-36	179	1	3-10	92	1	0-8			
PARSONS HOSP FLUSHING NY 11357	7	43	5-67	6	33	11-77	6	17	1-62	37	0	0-52	62	13	2-16	24	17	2-29	1	0	0-100	46	13	1-17	32	0	0-30			
PEEKSKILL HOSP PEEKSKILL NY 10566	14	29	7-55	15	33	17-64	41	7	3-23	20	0	0-87	147	5	2-10	50	2	1-17	16	0	0-94	113	6	2-11	63	0	0-11			
PELHAM BAY GENERAL HOSP BRONX NY 10461	1	0	0-98	5	40	11-82	23	0	2-31	51	0	0-22	154	5	3-11	62	0	2-16	15	0	0-89	100	1	2-11	41	0	0-17			
PENINSULA HOSP CENTER FAR ROCKAWAY NY 11691	19	53	15-60	76	50	29-55	68	9	5-21	40	0	0-28	175	8	4-12	73	4	3-18	6	17	0-98	151	6	2-10	83	4	1-9			
PHELPS MEMORIAL HOSP NORTH TARRYTOWN NY 10591	15	33	7-53	20	40	21-64	52	10	4-22	61	0	0-15	204	4	3-10	59	5	1-17	12	0	0-100	110	4	2-11	101	1	0-8			
PHYSICIANS HOSP JACKSON HEIGHTS NY 11372	5	0	5-75	7	57	11-74	27	11	3-28	25	0	0-76	145	3	2-11	59	10	2-18	5	0	0-100	96	3	1-11	70	1	0-10 0			
PLACID MEMORIAL HOSP LAKE PLACID NY 12946	1	100	3-99	2	0	3-91	.	.		.	.		15	0	1-35	9	11	1-50	.	.		18	0	1-31	5	0	0-98			
PRESBYTERIAN HOSP NEW YORK NY 10032	48	8	7-39	37	49	23-56	139	6	4-15	624	0	0-2	372	3	3-8	324	2	1-9	63	0	0-34	440	5	3-8	433	1	1-4			
PUTNAM COMMUNITY HOSP CARMEL NY 10512	8	13	8-68	14	36	17-66	25	4	3-31	61	2	0-15	124	4	2-11	41	0	1-20	9	0	0-61	94	1	2-11	31	6	0-20			
QUEENS HOSP MED CTR JAMAICA NY 11432	13	46	7-56	28	64	25-62	11	18	0-46	36	0	0-61	77	9	2-13	55	4	1-17	9	0	0-98	75	8	1-12	32	0	0-22			
RICHMOND MEMORIAL HOSP HLT STATEN ISLAND NY 10309	11	18	8-60	9	44	15-73	23	0	2-29	29	0	0-64	102	6	2-12	36	8	1-21	3	0	0-100	105	3	2-11	60	2	0-12 0			
ROCHESTER GEN HOSP ROCHESTER NY 14621	34	26	10-46	16	31	19-66	125	2	4-15	85	0	0-11	375	7	4-10	193	4	2-11	33	0	0-65	496	4	3-7	222	0	0-5			
ROCHESTER PSYCHIATRIC CENT ROCHESTER NY 14620	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.				
ROCKEFELLER UNIV HOSP NEW YORK NY 10021	.	.		.	.		.	.		.	.		3	0	0-99	.	.		.	.		1	0	0-100	.	.				
ROME HOSP MURPHY MEM HOSP ROME NY 13440	15	33	10-58	19	32	15-57	37	19	3-25	4	0	0-100	181	4	2-10	98	6	2-13	18	0	0-89	146	3	2-10	78	3	0-10			
ROOSEVELT HOSP NEW YORK NY 10019	15	20	8-55	16	19	17-63	116	3	4-16	38	0	0-43	246	5	3-10	153	3	1-11	24	0	0-32	169	5	2-9	156	0	1-6			
ROSWELL PARK MEM INSTITUTE BUFFALO NY 14203	2	50	0-93	3	67	9-90	1	100	0-99	.	.		36	19	4-26	48	0	1-18	6	0	0-100	1	0	0-100	7	0	0-96			
SALAMANCA DIST HOSP SALAMANCA NY 14779	1	0	0-97	4	0	7-83	8	0	1-53	.	.		38	11	2-21	5	20	0-70	1	0	0-100	14	7	1-37	11	0	0-61			
SAMARITAN HOSP TROY NY 12180	31	26	15-53	29	17	17-52	44	16	4-24	13	0	0-97	204	7	3-10	80	1	1-14	24	0	0-39	163	7	3-10	78	0	0-9			
SARATOGA HOSP SARATOGA SPRINGS NY 12866	16	6	7-52	10	50	12-67	49	8	2-20	14	7	0-98	134	7	3-12	45	13	1-19	9	0	0-100	88	1	2-12	48	2	0-14			
SCHUYLER HOSP MONTOUR FALLS NY 14865	4	0	1-76	4	50	8-83	4	0	0-83	.	.		50	0	1-16	5	0	1-67	3	0	0-100	40	5	1-18	12	0	0-48			
SENECA FALLS HOSP SENECA FALLS NY 13148	2	0	2-90	1	0	2-98	1	0	0-99	1	0	0-100	13	0	1-40	4	0	0-79	1	0	0-100	14	0	0-39	5	0	0-99			

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																					
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SHEEHAN MEMORIAL EMERGENCY BUFFALO NY 14204	NY-231*	534	10	7-15	35	23	16-47	14	7	8-52	9	44	5-58	29	21	11-42	27	44	20-55	9	11	2-53	29	10	7-36
SHERIOAN PARK HOSP TONAWANOA NY 14150	NY-232*	133	0	0-16	.	.		.	.		.	.		.	.		.	.		.	.		1	0	0-97
SISTERS OF CHARITY HOSP BUFFALO NY 14214	NY-233	3211	11	9-16	296	25	19-34	110	23	21-40	73	11	9-30	183	23	17-30	107	34	29-49	96	15	9-29	230	17	15-28
SMITHERS ALCOHOLISM CTR-RE NEW YORK NY 10028	NY-234*	8	0	0-71	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
SOLOIERS SAILORS HOSP PENN YAN NY 14527	NY-235	515	12	10-18	57	37	15-40	14	43	10-54	15	7	7-49	36	17	11-39	15	33	20-67	7	29	2-60	55	15	14-37
SOUTH NASSAU COMM HOSP OCEANSIOE NY 11572	NY-236	3752	14	11-17	394	25	19-33	160	26	22-38	97	20	12-31	231	22	18-30	167	37	31-48	80	29	11-33	243	29	18-31
SOUTHAMPTON HOSP SOUTHAMPTON NY 11968	NY-237*	1460	15	10-17	130	38	17-36	76	34	18-39	37	16	7-33	86	29	16-35	68	38	28-53	27	19	6-38	117	18	12-29
SOUTHSIOE HOSP BAY SHORE NY 11706	NY-238*	2594	14	10-16	227	27	17-33	86	28	20-40	48	33	11-36	189	21	17-30	115	41	30-49	81	32	11-33	212	21	13-26
ST AGNES HOSP WHITE PLAINS NY 10605	NY-239*	1121	12	10-17	94	30	17-38	59	19	18-41	27	37	10-43	72	19	16-36	34	26	20-53	16	25	5-46	103	21	14-31
ST ANTHONY COMMUNITY HOSP WARWICK NY 10990	NY-240	545	11	9-17	42	36	19-49	17	35	10-50	12	0	7-54	34	24	13-42	22	45	18-57	17	12	4-43	56	13	12-34
ST BARNABAS HOSP BRONKS NY	NY-241*	2705	17	12-18	104	25	16-36	139	17	22-38	68	19	11-33	138	23	18-33	76	24	28-51	70	30	11-34	443	33	19-30
ST CHARLES HOSP PORT JEFFERSON NY 11777	NY-242*	1796	14	10-16	189	30	20-37	72	29	19-41	41	24	10-36	82	28	16-35	56	32	26-52	49	31	15-43	139	23	12-27
ST CLARES HOSP SCHENECTAOY NY 12304	NY-243*	2588	13	10-16	238	26	17-33	113	22	19-37	47	30	10-36	175	24	17-31	130	35	30-49	30	27	7-38	231	21	14-27
ST CLARES HOSP HEALTH CENT NEW YORK NY 10019	NY-244*	1085	11	9-17	113	25	17-37	32	25	16-47	26	35	9-42	38	16	13-41	34	21	25-57	43	14	8-34	88	22	12-31
ST ELIZABETHS HOSP UTICA NY 13501	NY-245*	2055	12	9-16	153	25	19-37	57	39	18-42	35	20	9-38	113	22	16-32	95	48	29-51	38	5	6-34	124	23	16-33
ST FRANCIS HOSP BUFFALO NY 14214	NY-246	531	9	8-16	54	17	10-34	16	38	13-57	20	0	5-40	33	21	12-41	10	50	19-74	14	29	9-55	29	10	6-35
ST FRANCIS HOSP OLEAN NY 14760	NY-247*	907	9	10-17	48	27	17-45	31	16	17-49	12	33	6-52	48	10	13-37	66	30	28-52	22	9	7-43	74	18	13-33
ST FRANCIS HOSP POUGHKEEPSIE NY 12601	NY-248	1999	12	9-15	123	26	16-35	36	28	17-47	44	20	9-35	118	24	16-32	57	44	26-52	46	22	10-36	225	19	14-27
ST FRANCIS HOSP ROSLYN NY 11576	NY-249*	2432	10	8-15	136	18	16-34	61	34	20-44	55	22	10-34	156	24	15-29	106	28	29-49	21	19	6-41	116	25	16-33
ST JAMES MERCY HOSP HORNELL NY 14843	NY-250	1087	8	8-15	87	26	15-36	32	25	15-46	17	0	5-42	49	24	14-39	33	24	21-54	11	9	4-52	110	8	12-29
ST JEROME HOSP BATAVIA NY 14020	NY-251*	888	9	8-16	58	17	17-42	41	34	17-45	17	29	5-43	73	16	14-33	19	47	19-60	15	13	6-48	71	7	12-33
ST JOHNS ESPISCOPAL HOSP HEMPSTEAO NY 11550	NY-252	3903	15	11-17	275	35	20-36	164	34	23-38	82	20	11-31	257	25	19-30	144	37	31-49	76	22	9-31	376	26	19-30
ST JOHNS RIVERSIOE HOSP YONKERS NY 10701	NY-253	2053	11	10-16	187	28	17-34	77	30	19-40	29	31	10-42	148	20	16-31	80	26	28-51	46	11	7-33	123	11	12-29
ST JOSEPH INTERCOMMUNITY H CHEEKTOWAGA NY 14225	NY-254*	2426	14	10-16	155	38	19-37	122	27	20-38	54	26	9-33	164	29	16-30	146	34	30-48	52	23	10-35	137	19	14-30
ST JOSEPHS HOSP ELMIRA NY 14902	NY-255*	1552	10	8-15	94	26	15-36	47	36	17-43	21	29	5-40	90	20	14-32	49	47	24-52	38	11	6-34	97	19	13-31
ST JOSEPHS HOSP YONKERS NY 10701	NY-256	1659	14	11-17	114	22	16-36	72	19	20-42	37	16	11-40	90	32	15-34	63	29	28-54	48	33	11-38	139	29	17-34

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SHEEHAN MEMORIAL EMERGENCY BUFFALO NY 14204	4	25	1-76	1	0	0-97	11	27	1-44	3	0	0-100	55	7	2-16	15	7	1-36	.	.		60	2	1-13	51	0	0-15
SHERIOAN PARK HOSP TONAWANOA NY 14150	.	.		.	.		.	.		12	0	0-100	1	0	0-100	.	.		.	.		.	.		90	0	0-11 0
SISTERS OF CHARITY HOSP BUFFALO NY 14214	20	25	12-56	29	14	17-53	89	8	7-22	161	1	0-5	332	5	3-9	77	8	2-16	37	0	0-48	273	5	2-8	187	3	1-6
SMITHERS ALCOHOLISM CTR-RE NEW YORK NY 10028	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
SOLOIERS SAILORS HOSP PENN YAN NY 14527	2	0	1-90	6	33	8-74	14	7	1-38	3	33	0-100	50	6	2-17	23	4	0-28	11	0	0-66	37	3	1-19	21	0	0-30
SOUTH NASSAU COMM HOSP OCEANSIOE NY 11572	33	27	14-51	54	41	25-54	103	11	6-19	46	0	0-34	407	3	3-9	218	2	1-10	17	0	0-77	269	3	3-9	151	3	0-6
SOUTHAMPTON HOSP SOUTHAMPTON NY 11968	7	43	11-75	11	36	16-70	34	12	3-26	23	0	0-82	192	5	2-10	48	8	2-19	5	0	0-100	126	3	2-11	66	2	0-11
SOUTHSIOE HOSP BAY SHORE NY 11706	22	36	11-52	25	56	20-59	67	18	5-21	91	0	0-9	253	5	3-10	94	4	2-13	16	0	0-51	230	5	2-8	106	2	0-8
ST AGNES HOSP WHITE PLAINS NY 10605	6	17	5-71	4	0	7-82	28	21	4-30	34	0	0-52	117	6	3-12	58	3	1-17	5	0	0-100	111	5	2-11	56	4	0-12
ST ANTHONY COMMUNITY HOSP WARWICK NY 10990	3	33	1-82	4	100	11-87	15	0	1-36	29	0	0-64	62	2	1-14	27	0	1-25	4	0	0-99	43	0	1-17	30	0	0-24 0
ST BARNABAS HOSP BRONKS NY	23	22	7-47	35	66	26-61	49	10	4-22	23	0	0-63-	189	11	4-12	171	12	6-17	5	0	0-95	152	6	2-10	116	2	0-7
ST CHARLES HOSP PORT JEFFERSON NY 11777	10	50	7-62	8	38	18-79	40	20	4-25	25	4	0-53	165	4	2-10	77	8	2-15	20	0	0-81	125	5	2-11	104	3	0-8
ST CLARES HOSP SCHENECTAOY NY 12304	24	46	10-50	21	43	16-56	81	14	5-19	119	0	0-8	316	6	3-9	127	3	2-13	25	0	0-89	198	6	2-9	102	3	1-8
ST CLARES HOSP HEALTH CENT NEW YORK NY 10019	12	25	8-60	5	40	14-85	26	0	3-29	16	0	0-93	104	7	3-14	37	3	1-21	10	0	0-99	48	2	2-17	66	2	0-11
ST ELIZABETHS HOSP UTICA NY 13501	19	37	9-52	20	50	20-62	51	18	3-20	65	0	0-19	191	6	3-11	87	1	2-15	24	4	0-36	255	5	3-9	93	0	0-8
ST FRANCIS HOSP BUFFALO NY 14214	2	50	7-96	1	0	3-99	12	33	2-44	55	0	0-19	68	4	2-14	30	0	0-23	9	0	0-95	22	5	1-26	23	4	0-25
ST FRANCIS HOSP OLEAN NY 14760	6	33	3-67	3	33	6-87	10	0	1-47	96	0	0-8	76	5	3-16	42	0	1-19	8	0	0-98	99	0	2-12	30	0	0-21 0
ST FRANCIS HOSP POUGHKEEPSIE NY 12601	15	20	8-55	14	36	12-59	35	11	3-26	35	0	0-40	204	7	2-10	75	8	1-14	10	0	0-89	175	6	2-10	107	1	0-7
ST FRANCIS HOSP ROSLYN NY 11576	9	22	9-67	15	53	23-71	29	3	3-29	9	0	0-99	162	6	3-11	77	5	1-14	6	0	0-95	963	5	3-7	49	0	0-15
ST JAMES MERCY HOSP HORNELL NY 14843	13	8	2-50	15	27	14-61	29	7	4-30	23	0	0-79	128	1	2-10	55	2	1-17	11	0	0-85	96	6	2-12	74	0	0-10
ST JEROME HOSP BATAVIA NY 14020	2	50	1-90	3	0	2-82	13	8	2-41	7	14	0-81	106	4	2-13	53	9	1-17	3	0	0-100	113	4	2-10	45	0	0-16
ST JOHNS ESPISCOPAL HOSP HEMPSTEAO NY 11550	41	41	15-50	74	47	26-52	141	13	6-18	84	0	0-12	324	6	3-9	134	5	2-12	31	0	0-40	362	4	3-8	209	3	0-5
ST JOHNS RIVERSIOE HOSP YONKERS NY 10701	7	57	5-68	37	35	23-56	47	2	3-22	16	0	0-91	272	4	3-10	88	2	1-13	21	0	0-87	193	2	2-9	100	2	0-8 0
ST JOSEPH INTERCOMMUNITY H CHEEKTOWAGA NY 14225	15	33	6-52	23	43	14-53	65	11	4-20	110	1	0-7	295	4	3-9	69	4	1-15	19	0	0-85	218	6	2-9	136	0	0-7
ST JOSEPHS HOSP ELMIRA NY 14902	2	0	0-90	19	26	13-54	39	5	4-26	101	1	0-10	138	6	2-10	41	2	1-20	3	0	0-100	56	5	2-15	136	1	0-6
ST JOSEPHS HOSP YONKERS NY 10701	20	35	13-56	21	24	21-63	70	9	4-19	8	0	0-100	168	6	3-11	89	8	2-15	14	0	0-91	109	6	2-12	45	2	0-15

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range ot Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST JOSEPHS HOSP HEALTH CEN SYRACUSE NY 13203	NY-257	3668	13	10-17	395	23	19-33	152	35	21-37	95	16	11-30	182	23	17-30	147	33	30-48	72	24	11-34	240	23	17-30
ST LAWRENCE PSYCH CENTER M OGOENSBURG NY 13669	NY-258*	92	10	1-14	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
ST LUKES HOSP CENTER NEW YORK NY 10025	NY-259	3576	11	10-16	347	22	19-34	134	17	20-37	112	17	11-29	200	17	17-29	93	24	29-51	70	23	10-33	257	17	16-28
ST LUKES HOSP OF NEWBURGH NEWBURGH NY 12550	NY-260*	1713	11	9-16	136	24	16-35	86	21	20-40	30	17	9-40	139	25	15-30	63	32	26-51	56	14	9-33	124	18	12-29
ST LUKES MEMORIAL HOSP CEN UTICA NY 13503	NY-261	2174	12	10-17	177	21	17-33	97	31	20-40	45	22	8-33	134	20	16-31	101	34	29-49	57	23	11-36	180	18	13-27
ST MARYS HOSP AMSTEROAM NY 12010	NY-262*	1068	12	10-18	71	25	17-40	53	19	17-41	11	27	6-55	81	16	14-33	51	22	26-53	21	33	12-52	114	25	14-31
ST MARYS HOSP ROCHESTER NY 14611	NY-263*	1818	12	9-15	117	24	16-35	59	24	18-42	48	19	8-33	97	23	15-33	81	42	29-52	37	16	6-34	154	25	16-32
ST MARYS HOSP TROY NY 12180	NY-264	1747	11	10-17	135	29	19-37	65	22	22-45	36	8	6-33	129	24	15-30	41	34	24-54	23	22	6-39	186	20	16-30
ST MARYS HOSP OF BROOKLYN BROOKLYN NY 11213	NY-265*	965	14	10-17	76	21	15-37	60	33	17-41	32	6	7-35	83	16	14-32	28	46	22-58	49	20	9-35	93	18	10-27
ST PETERS HOSP ALBANY NY 12208	NY-266	3330	13	11-17	384	20	18-32	131	28	20-37	104	14	11-29	157	26	17-31	147	33	31-48	72	24	11-34	311	23	16-28
ST VINCENTS HOSP MEOICAL C NEW YORK NY 10011	NY-267*	3639	11	10-16	332	20	22-36	115	26	21-39	80	26	14-35	145	18	15-30	126	44	31-50	52	15	11-37	293	26	17-29
ST VINCENTS MEO CENTER OF STATEN ISLANO NY 10310	NY-268	2720	15	10-17	275	25	19-34	118	30	21-38	50	14	8-32	153	27	17-31	127	43	28-47	36	11	11-41	270	26	16-29
STATE UNIV HOSP-UPSTATE ME SYRACUSE NY 13210	NY-269	1467	11	8-15	135	30	19-38	44	25	15-42	29	10	6-35	57	19	14-36	47	43	22-50	30	20	10-42	105	19	11-27
STATEN ISLANO HOSP STATEN ISLANO NY 10305	NY-270	2863	15	10-17	209	39	21-37	92	30	21-41	74	15	13-35	175	28	17-31	107	44	31-51	54	19	11-37	259	28	16-28
STRONG MEM HOSP ROCHESTER NY 14642	NY-271*	3633	9	8-14	324	17	17-32	104	22	19-37	59	14	12-35	125	20	16-31	168	29	30-47	38	24	8-37	222	22	14-27
SUMMIT PARK HOSP-MENTAL HL POMONA NY 10970	NY-272*	96	1	0-13	.	.		.	.		.	.		.	.		.	.			.		.	.	
SUNY OOWNSTATE MEDICAL CEN BROOKLYN NY 11203	NY-273	1118	7	8-15	113	27	20-40	21	10	14-52	14	0	6-49	27	19	10-41	16	25	15-59	14	29	9-55	29	24	9-39
TAYLOR BROWN MEM HOSP WATERLOO NY 13165	NY-274	258	11	9-19	12	50	9-58	9	22	9-64	3	0	1-81	18	11	9-47	5	60	10-80	10	10	4-54	26	23	11-44
THE CORNWALL HOSPITAL CORNWALL NY 12518	NY-275*	966	13	9-16	83	29	19-41	51	33	18-43	18	44	7-45	69	25	13-34	32	34	24-58	35	17	8-37	77	16	9-27
THE MARY IMOGENE BASSETT H COOPERSTOWN NY 13326	NY-276	1591	13	10-17	182	25	19-36	48	38	16-42	46	28	14-40	61	26	16-38	58	31	27-53	16	38	7-48	138	26	17-33
TIOGA GENERAL HOSP WAVERLY NY 14892	NY-277	442	12	10-19	34	29	12-43	24	33	18-55	14	21	9-54	31	26	14-45	18	17	17-60	1	0	0-97	44	14	9-33
TOMPKINS COMMUNITY HOSP IN ITHACA NY 14850	NY-278	1455	13	9-16	125	31	17-36	57	28	18-42	35	20	5-31	77	26	16-36	46	33	30-59	22	18	4-37	142	29	15-31
TRI-CO MEM HOSP GOWANOA NY 14070	NY-279*	440	13	7-15	25	24	9-44	16	31	10-52	7	43	1-58	24	17	8-40	14	43	18-66	13	0	3-46	52	21	8-30 0
UNION HOSP BRONX NY 10458	NY-280	736	9	9-17	62	15	12-35	32	9	15-46	19	32	8-47	48	23	11-35	22	23	20-60	11	9	3-49	67	15	12-33
UNITED HEALTH SERVICES JOHNSON CITY NY 13790	NY-281*	4350	12	9-15	219	21	17-33	168	28	22-37	98	24	11-30	279	26	18-29	176	34	28-44	92	24	10-30	356	22	15-27
UNITEO HOSP PORT CHESTER NY 10573	NY-282*	1942	9	10-17	146	19	16-34	117	21	20-38	53	8	7-30	106	22	16-33	77	31	28-51	45	29	13-40	184	15	15-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST JOSEPHS HOSP HEALTH CEN SYRACUSE NY 13203	43	26	10-44	16	38	14-59	114	5	5-18	36	0	0-25	396	7	4-10	152	4	2-12	25	0	0-26	398	4	3-8	147	1	0-6
ST LAWRENCE PSYCH CENTER M OGDENSBURG NY 13669	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
ST LUKES HOSP CENTER NEW YORK NY 10025	36	19	7-41	32	44	22-58	103	11	6-20	185	1	0-4	255	5	3-10	179	2	2-12	30	3	0-30	448	10	4-9	154	1	0-6
ST LUKES HOSP OF NEWBURGH NEWBURGH NY 12550	14	29	7-55	16	31	15-61	23	13	3-32	51	0	0-24	187	5	2-10	58	0	1-16	6	0	0-100	141	4	2-10	71	0	0-10
ST LUKES MEMORIAL HOSP CEN UTICA NY 13503	32	38	13-50	21	19	17-58	66	8	4-19	59	2	0-18	248	4	3-10	76	1	1-14	13	0	0-100	148	6	2-10	117	3	0-7
ST MARYS HOSP AMSTEROAM NY 12010	12	42	11-63	9	33	13-71	27	4	3-28	6	0	0-100	100	5	2-13	59	2	1-16	13	0	0-95	84	4	1-12	38	5	0-18
ST MARYS HOSP ROCHESTER NY 14611	22	36	11-52	5	20	6-75	57	4	3-20	318	0	0-2	117	6	3-14	88	11	3-17	15	7	0-97	94	10	2-13	67	0	0-13
ST MARYS HOSP TROY NY 12180	33	21	13-49	13	15	12-61	52	2	5-24	8	0	0-100	206	3	4-12	71	6	2-16	5	0	0-100	178	2	2-9	88	1	0-9
ST MARYS HOSP OF BROOKLYN BROOKLYN NY 11213	5	40	8-80	17	47	17-62	16	13	2-37	19	0	0-80	67	4	2-14	29	0	1-24	3	0	0-100	66	3	1-13	22	14	0-28
ST PETERS HOSP ALBANY NY 12208	26	27	12-52	29	31	19-55	130	9	5-17	6	0	0-100	308	4	3-9	150	5	2-12	27	4	0-75	268	6	3-9	225	0	1-5
ST VINCENTS HOSP MEDICAL C NEW YORK NY 10011	25	12	10-50	20	15	20-63	104	4	6-19	182	2	0-4	282	5	4-10	154	6	3-13	18	0	0-60	335	7	3-9	197	2	1-6
ST VINCENTS MEO CENTER OF STATEN ISLANO NY 10310	26	19	11-50	19	47	17-60	73	10	4-19	12	0	0-82	246	10	3-10	106	5	1-13	17	0	0-85	324	7	2-8	125	1	0-7
STATE UNIV HOSP-UPSTATE ME SYRACUSE NY 13210	29	14	7-43	6	50	11-78	24	4	2-28	.	.		72	14	4-19	54	2	1-17	6	0	0-91	208	2	3-9	128	1	0-7
STATEN ISLANO HOSP STATEN ISLAND NY 10305	21	29	6-47	22	45	22-63	56	11	3-20	18	0	0-91	272	6	4-10	121	7	3-14	27	0	0-57	235	5	3-9	98	1	0-8
STRONG MEM HOSP ROCHESTER NY 14642	49	20	8-39	16	56	14-59	96	11	4-17	121	2	0-7	244	7	4-11	150	5	1-11	41	0	0-32	304	6	3-8	245	0	0-4
SUMMIT PARK HOSP-MENTAL HL POMONA NY 10970	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
SUNY DOWNSTATE MEDICAL CEN BROOKLYN NY 11203	49	4	2-35	6	83	15-82	6	0	1-62	13	0	0-85	55	5	1-15	42	0	0-19	8	0	0-79	134	6	2-10	49	2	0-14
TAYLOR BROWN MEM HOSP WATERLOO NY 13165	5	0	1-71	7	29	8-69	2	0	0-92	.	.		32	3	1-22	9	0	2-51	2	0	0-100	14	7	1-37	9	11	0-86
THE CORNWALL HOSPITAL CORNWALL NY 12518	4	25	2-76	1	0	2-98	19	16	3-34	30	0	0-70	107	5	2-11	26	0	1-25	5	0	0-100	75	3	1-12	49	0	0-14
THE MARY IMOGENE BASSETT H COOPERSTOWN NY 13326	20	15	9-51	7	71	22-85	31	19	3-26	151	0	0-6	158	7	3-12	72	3	1-14	8	0	0-97	107	4	2-12	75	1	0-10
TIOGA GENERAL HOSP WAVERLY NY 14892	1	0	0-97	8	38	12-72	10	0	0-48	.	.		44	2	1-18	19	0	0-36	3	0	0-100	47	0	1-16	15	7	0-41
TOMPKINS COMMUNITY HOSP IN ITHACA NY 14850	8	25	2-60	13	31	18-69	50	12	3-21	48	0	0-28	150	4	2-10	56	2	1-16	9	0	0-99	92	3	2-13	93	2	1-9
TRI-CO MEM HOSP GOWANOA NY 14070	2	50	1-90	6	33	10-76	22	14	1-29	9	0	0-100	67	6	1-14	22	14	0-32	3	0	0-100	23	4	1-26	16	0	0-46
UNION HOSP BRONX NY 10458	14	7	16-66	13	15	17-67	16	19	2-36	4	0	0-100	103	3	2-11	72	3	1-15	8	0	0-100	62	2	1-14	23	0	0-27
UNITEO HEALTH SERVICES JOHNSON CITY NY 13790	41	41	13-47	26	35	19-57	121	5	5-17	102	2	0-8	360	6	3-9	142	5	2-13	27	0	0-35	435	5	3-8	295	1	0-4
UNITEO HOSP PORT CHESTER NY 10573	16	19	7-52	11	18	10-61	46	2	3-22	30	0	0-51	190	4	3-10	94	3	1-13	17	0	0-100	104	2	2-11	118	1	0-7

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories: Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNIVERSITY HOSP STONY BROOK NY 11794	NY-283	1451	12	9-16	175	25	20-37	30	17	15-48	33	24	7-36	36	19	10-36	47	36	23-51	31	23	10-41	94	23	14-32
VASSAR BROTHERS HOSP POUGHKEEPSIE NY 12601	NY-284	2079	13	10-17	180	34	19-37	67	37	19-41	56	20	10-34	147	23	16-31	87	44	27-48	50	12	7-32	218	17	15-28
VICTORY MEM HDSP BROOKLYN NY 11228	NY-285*	2506	13	10-16	175	23	18-35	83	33	18-38	70	31	11-33	184	16	18-31	126	42	32-51	50	12	7-31	243	16	14-26
WESTCHESTER CO MED CTR VALHALLA NY 10595	NY-286*	2051	9	9-15	174	21	21-39	31	26	17-49	22	9	5-39	78	17	16-35	132	23	27-45	16	0	3-42	96	17	13-32
WESTCHESTER SQ HOSP BRONX NY 10461	NY-287*	2389	12	10-16	260	24	16-31	99	19	20-39	47	32	12-38	170	21	16-30	105	40	29-49	19	21	9-48	180	11	13-27
WESTFIELD MEMORIAL HOSP WESTFIELD NY 14787	NY-288	344	14	10-20	30	47	14-47	8	25	9-67	9	33	4-55	24	17	11-45	16	25	20-65	6	0	1-63	45	24	13-39
WHITE PLAINS HOSP MED CTR WHITE PLAINS NY 10601	NY-289	2416	10	10-16	257	22	17-32	97	19	20-39	63	21	11-33	100	17	15-32	87	30	30-52	40	18	11-40	198	17	14-28
WILLARD PSYCHIATRIC CTR M/ WILLARD NY 14588	NY-290	107	8	2-13	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
WINTHRDP UNIVERSITY HDSP MINEOLA NY 11501	NY-291	4301	11	10-16	445	18	18-32	158	25	21-37	84	17	9-28	220	19	17-29	194	31	30-46	60	32	14-40	284	26	16-28
WDMANS CHRISTIAN ASSOC HDS JAMESTDWN NY 14701	NY-292*	2329	11	10-16	158	20	18-36	85	16	20-40	57	18	9-32	113	20	16-32	91	37	30-51	58	14	10-34	171	19	16-31
WOODHULL MEOICAL MENTAL H BROOKLYN NY 11206	NY-293	1033	16	8-15	34	29	12-43	63	43	16-39	27	22	7-39	80	18	13-32	31	61	24-58	39	28	5-32	86	17	8-25
WYCKOFF HEIGHTS HDSP BROOKLYN NY 11237	NY-294*	2157	15	11-17	192	27	16-32	88	34	21-41	56	16	10-33	209	24	18-31	90	41	28-50	36	17	10-39	217	16	15-29
WYOMING CD COMM HOSP WARSAW NY 14569	NY-295	819	14	11-18	28	29	11-44	37	27	19-49	18	11	7-45	46	28	14-39	44	36	27-57	38	13	9-37	116	22	14-31
YDNKERS GENERAL HOSP YDNKERS NY 10703	NY-296	1362	16	11-19	118	ˉ42	25-45	70	19	19-41	32	28	8-38	85	32	15-33	56	29	26-53	29	24	9-42	127	20	14-30

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNIVERSITY HOSP STONY BROOK NY 11794	25	24	9-48	5	60	16-87	20	10	2-31	6	0	0-100	107	4	3-14	55	2	1-16	16	0	0-88	159	4	2-9	80	0	0-9 0
VASSAR BROTHERS HOSP POUGHKEEPSIE NY 12601	12	33	10-63	31	29	19-54	50	10	3-21	51	0	0-19	242	4	3-9	86	3	1-14	19	0	0-57	155	3	2-9	88	1	0-9
VICTORY MEM HOSP BROOKLYN NY 11228	13	38	17-69	20	35	17-59	59	7	4-21	26	0	0-76	256	5	3-9	151	2	2-12	29	0	0-65	290	6	2-7	107	3	0-7
WESTCHESTER CO MED CTR VALHALLA NY 10595	40	18	7-40	15	33	18-66	20	15	2-33	64	0	0-12	105	7	2-13	63	2	2-16	4	0	0-100	561	5	3-8	72	3	0-11
WESTCHESTER SQ HOSP BRONX NY 10461	20	25	10-52	19	32	16-59	75	9	4-20	25	0	0-52	318	4	3-9	118	3	1-12	21	0	0-86	203	3	2-9	135	1	0-6
WESTFIELO MEMORIAL HOSP WESTFIELO NY 14787	7	14	8-71	6	67	7-72	11	0	1-44	.	.		29	0	1-22	7	0	0-63	2	0	0-100	33	0	1-20	24	0	0-30
WHITE PLAINS HOSP MEO CTR WHITE PLAINS NY 10601	16	31	8-54	24	33	24-63	66	8	4-19	61	0	0-17	244	5	3-9	146	3	1-11	10	0	0-100	183	4	3-10	128	2	0-7
WILLARO PSYCHIATRIC CTR M/ WILLARD NY 14588	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.			.	
WINTHROP UNIVERSITY HOSP MINEOLA NY 11501	36	22	13-49	19	32	20-63	127	10	5-18	88	0	0-9	548	3	3-8	250	5	2-11	46	0	0-22	516	6	3-7	183	1	0-5
WOMANS CHRISTIAN ASSOC HOS JAMESTOWN NY 14701	14	43	11-61	24	50	22-62	60	8	5-22	40	0	0-35	243	6	4-11	104	5	3-15	19	0	0-70	202	7	3-9	120	3	1-7 0
WOOOHULL MEOICAL MENTAL H BROOKLYN NY 11206	13	31	7-56	17	71	16-61	17	6	2-35	1	0	0-100	59	7	1-15	29	0	1-24	.	.		90	6	1-11	18	0	0-53
WYCKOFF HEIGHTS HOSP BROOKLYN NY 11237	22	32	10-51	10	10	13-68	54	28	4-22	16	0	0-96	233	4	3-10	113	4	2-13	12	0	0-99	231	5	2-8	84	2	0-9
WYOMING CO COMM HOSP WARSAW NY 14569	6	67	8-75	14	29	12-60	15	7	1-36	23	0	0-91	88	3	2-12	35	0	1-22	6	0	0-100	91	3	1-11	20	0	0-33 0
YONKERS GENERAL HOSP YONKERS NY 10703	11	55	10-63	13	54	21-72	24	13	3-31	19	0	0-80	125	2	3-12	78	14	3-17	4	0	0-100	131	8	2-11	59	0	0-12

*Written Comments Not Submitted.

A.O.FOX
MEMORIAL HOSPITAL

Office of the President

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Comments on HCFA Mortality Data

Medicare Provider # 33-0085

The data used by HCFA indicate that a total of 150 Medicare patients admitted to A.O. Fox Memorial Hospital during the tabulation period died within 30 days of admission. The data show 124 died while a patient in the hospital, whereas 25 died after discharge. Our records indicate that one patient's date of death, shown as the day after discharge, actually occurred while the patient was still hospitalized. One obvious entry error lists a patient as deceased nine days prior to discharge. The corrected data for these two patients are attached.

It is impossible to determine the percentage of the 24 patients shown as dying after discharge who were in fact alive. Information concerning death after discharge is not included in the patient's medical record.

More importantly, we would emphasize that the HCFA data are not, in themselves, measures of hospital performance. At best, they can be used to assist in focusing quality assurance activities. Such data cannot be used directly as a measure of hospital performance. Under no circumstances should they be used as the basis for judging the quality of care provided by hospitals. This type of statistical analysis can do no more than identify potential areas for further evaluation.

Sincerely,

Lorraine B Kabot

Lorraine B. Kabot
President & Chief Executive Officer

Encl
LBK:RRN:bab

One Norton Avenue, Oneonta, New York 13820
607-432-2000

Medicare Provider # 33-0085

Corrected HCFA Mortality Data

PATIENT ID #	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	CORRECTION
[redacted]	11/18/86	12/07/86	11/28/86	Recorded date of death: 12/07/86
[redacted]	04/07/86	04/09/86	04/10/86	Recorded date of death: 04/09/86

Albany Medical
Center HOSPITAL
New Scotland Avenue, Albany, New York 12208
(518) 445-3125

October 23, 1987

MEDICARE PROVIDER #33-0013

A review of the 1986 mortality data prepared by the Health Care Financing Administration shows Albany Medical Center Hospital's mortality rates to be within or below predicted ranges in 15 of 16 diagnostic categories. In the sixteenth category, "Low-Risk Heart Disease", Albany Medical Center's mortality rate is 9%, 1% above the range (3-8%) which is not significant. Included in the category of "Low-Risk Heart Disease are patients whose principal diagnoses include: chronic rheumatic disease; hypertension; acute and chronic forms of angina; pulmonary embolus; pericarditis and endocarditis. For Albany Medical Center, a regional referral center for patients with heart disease including those requiring open heart surgery, this category of patients is, in fact, high risk. This category of mortalities include patients whose average age of 74 years, 35% of whom had open heart surgery, 39% of whom were referred to Albany Medical Center Hospital by other hospitals or physicians and 32% of whom the patients requested the hospital staff not to resuscitate them if cardiac arrest were to occur.

Albany Medical Center, as a referral center which is able to provide both technology and expertise not available elsewhere in the region, by its very nature attracts a population of patients who will be at higher risk than patients with similar diagnoses treated elsewhere.

AN INSTITUTION OF ALBANY MEDICAL CENTER

A.L.Lee Memorial Hospital

510 South Fourth St. • Fulton, N. Y. 13069-2994
Telephone (315)592-2224

October 27, 1987

Harvey Brook
Health Standards and Quality Bureau
Room 2D2
Meadows East Building
6300 Security Boulevard
Baltimore, Maryland 21207

Dear Mr. Brook:

RE: HCFA Mortality Data 1986
Medicare Provider No. 33-0075 -

The data used by HCFA indicate that a total of 63 Medicare patients admitted to A. L. Lee Memorial Hospital died within 30 days of admission. Of these, 57 died while still a patient of the hospital, while 6 died after discharge. Our own records indicate that 1041 Medicare admissions occurred in 1986. Our records indicate that of the 63 Medicare patients who died within 30 days of admission while still an in-patient, 6 were still alive at the time of discharge.

Out of the 63 patients, 13 patients were on DNR (Do Not Resuscitate) status, 1 patient was on Alternate Level of Care (nursing home) status, and one patient on DNR and Alternate Level of Care status. Do Not Resuscitate status means there is an agreement on the part of the patient and/or family that should a cardiac or respiratory arrest occur, resuscitative efforts would not be undertaken.

Out of the 63 patients, 16 patients had multiple (2 or more) admissions to the Hospital during 1986.

In reviewing our data, all Actual Mortality Rates fall within the Range of Predicted Mortality Rates. In fact, in most categories, the A. L. Lee Memorial Hospital Actual Rate was in the lower quarter of the Range of Predicted Mortality Rates.

Sincerely,

Dennis A. Casey

Dennis A. Casey
Executive Director

DAC:ls

AMSTERDAM
MEMORIAL
HOSPITAL
We Care About You

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

To Whom It May Concern;

Attached please find the mortality listing provided to our facility by your agency. We have reviewed this information and find that several patients listed, have not been patients at our facility.according to our records. On the attached page, I have listed their HIC # and surname.

We are continuing to review the information and have no further comments regarding it at this time. Thank you for providing this listing and if we can be of any further assistance to your agency, please call.

Sincerely,

Robert Kleinbauer
Assistant Administrator

cc. Mort file

Attachments

AMSTERDAM MEMORIAL HOSPITAL • AMSTERDAM, NEW YORK 12010 • (518) 842-3100

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

AMSTERDAM
MEMORIAL
HOSPITAL
We Care About You

Patients listed on mortality report but not listed as patients at Amsterdam Memorial Hospital

HIC #	Surname	Date of Discharge
[redacted]	[redacted]	11/21/86
[redacted]	[redacted]	07/11/86
[redacted]	[redacted]	02/02/86
[redacted]	[redacted]	02/03/86
[redacted]	[redacted]	11/16/86
[redacted]	[redacted]	05/16/86
[redacted]	[redacted]	01/30/86

A. GORDON McALEER, JR., F.A.C.H.E.
Executive Director

den hill hospital
man drive • goshen, new york 10924
(914) 294-5441

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper,

Attached please find the comments on the 1986 HCFA mortality data report to be released in December; I am sending comments on behalf of Arden Hill Hospital as required by HCFA before October 28, 1987.

I cannot stress enough the questionable validity of this reporting of mortality data relative to the understanding of the general public. This is an inappropriate means of measuring quality of care or for providing quality assurance --for health care professionals and for consumers.

Thank you for the opportunity to publicly record our concerns regarding this matter.

Sincerely yours,

A. Gordon McAleer
Executive Director

encl.

..... concern for today — focus on the future

A. GORDON McALEER, JR., F.A.C.H.E.
Executive Director

rden hill hospital
an drive • goshen, new york 10924
(914) 294-5441

October 26, 1987

COMMENTS ON HCFA MORTALITY DATA

Arden Hill Hospital, Goshen, New York

The data used by the Health Care Financing Administration (HCFA), indicate that a total of 183 Medicare patients admitted to Arden Hill Hospital died within 30 days of admission. Of these, 156 died while still a patient at the hospital and 24 died after discharge. Of the remaining 3 patients, 2 were transferred to other hospitals and died within 14 days of transfer; 1 patient's information was incorrect, only the name corresponds between HCFA and Arden Hill Hospital records. It is impossible to verify the number of Medicare patients treated at Arden Hill Hospital due to possible multiple admissions, and possible multiple diagnoses, for individual beneficiaries to different hospitals. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic and other data used in your analyses.

Approximately 43 per cent of the deceased Medicare patients came to Arden Hill Hospital from 6 separate nursing home facilities with a 10 mile radius of the hospital campus. This is a significant percentage that has a great impact on Arden Hill Hospital's mortality reporting for 1986. Additionally, 3 patients, who were transferred to other acute/tertiary care hospitals in the area, died after discharge but were included in the Arden Hill mortality numbers. This discrepancy underlines the inaccuracy inherent in the 30-day post discharge date reporting period; it is literally impossible to follow and verify such data after discharge from a given hospital.

It is the opinion of Arden Hill Hospital that the current method of measurement and use of mortality data is simplistic, emotionally charged and open to misinterpretation by the general public. While we at Arden Hill did not exceed the range of acceptable statistics, we are concerned that this mortality data, as reported to the public in its current format, can undermine the public's confidence in hospitals and the health care system. This mortality data cannot and should not be used as a measure of quality for consumer orientation; it is not appropriate nor comprehensible to the general populace therefore it is useless as a quality of care barometer.

A. GORDON McALEER, JR., F.A.C.H.E.
Executive Director

den hill hospital
an drive • goshen, new york 10924
(914) 294-5441

October 12, 1987

Mr. William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Mr. Roper:

We have had an opportunity to review the accuracy of the 1986 mortality information you sent us in your letter of September 21, 1987.

The admissions and discharge information was accurate with one exception. One admission did not occur here. This was patient ID [redacted], in the diagnostic category "CA." Would you please correct your records accordingly.

Sincerely,

A. Gordon McAleer
Executive Director

AGMCA:lva

..... concern for today — focus on the future

A. GORDON McALEER, JR., F.A.C.H.E.
Executive Director

arden hill hospital
man drive • goshen, new york 10924
(914) 294-5441

October 27, 1987

Mr. William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

In reference to my letter to you dated October 12, 1987, I would like to retract the correction I proposed regarding the admission of Patient [redacted] ID [redacted], diagnostic category CA as part of Arden Hill Hospital's 1986 Mortality Data. [redacted] was admitted in 1986 and is included in our mortality reporting for that year.

Thank you for your attention to this matter and I regret any inconvenience this information may cause.

Sincerely,

A. Gordon McAleer
Executive Director

Auburn Memorial Hospital
AUBURN, NEW YORK 13021
TELEPHONE (315) 255-7011

October 20, 1987

Dr. William L. Roper, Administrator
Health Care Financing Administration
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Subject: Medicare Mortality Statistics

Dear Dr. Roper:

Thank you for the mortality statistics relative to Medicare patient utilization in 1986.

We have reviewed in detail the diagnostic categories relative to the predicted range of the actual mortality rates. The only statistic that Auburn Memorial Hospital extends beyond the predicted mortality rate is the diagnostic category of severe chronic heart disease which is 3% points above the predicted.

Our review indicates that the slight variance in the above statistic is due to Cayuga County having the third highest age population in the entire state and in particular our inordinate high percentage of old - old residents within the county. In addition, Auburn Memorial Hospital is the only hospital in the entire county and, therefore, receives virtually every admission from all the skill nursing facilities within the county. Therefore, one may conclude that this higher rate is due to the atypical population, the large number of nursing homes, and the only acute care facility that receives transfers from the nursing homes when these patients require acute medical need.

Once again, thank you very much for this statistical information.

Sincerely,

Christopher J. Rogers
Administrator

CJR/ey

Bayley Seton Hospital
A Sisters of Charity Health Care System Corporation

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Enclosed you will find the response of Bayley Seton Hospital to the Health Care Financing Administration Medicare Mortality Data.

Eric Feldmann
Vice President for Public Affairs
and Resources Development

EF/mb
enc.

Bay Street and Vanderbilt Avenue • Staten Island, New York 10304 • (718) 390-6000

COMMENTS ON THE HCFA MORTALITY DATA
BAYLEY SETON HOSPITAL, STATEN ISLAND, NEW YORK
MEDICARE PROVIDER # 330-381

Data Verification

The data used by HCFA indicate that a total of 70 Medicare patients admitted to Bayley Seton Hospital died within 30 days of admission. Of these, 61 died while still a patient of the hospital, while 9 died after discharge. Our own records indicate that 1,474 Medicare admissions occurred in 1986. Presumably the disparities with the HCFA data and the hospital data result from multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Bayley Seton is correct. It is impossible to verify the percentage of the 9 patients dying after discharge who were in fact alive at the time of discharge, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information, concerning the billing data available to HCFA, in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

The hospital's actual mortality rates in all diagnostic categories fall **inside or below** the range of predicted mortality rates.

It should be recognized that Bayley Seton Hospital has an active Oncology Service and Geriatric Service and therefore treats patients who have a severity of illness which is more complex.

In addition, we have contractual arrangements with long term facilities and state facilities and accordingly, treat patients in the end stage of their disease process.

It should be noted that we concur with the American Hospital Association, Hospital Association of New York State and Greater New York Hospital Association that mortality rates, in and of themselves, are not the most effective quality care indicators and at Bayley Seton are among a number of factors monitored as part of our facility's institution-wide quality assurance activities.

BELLEVUE
HOSPITAL CENTER
New York City
Health and Hospitals
Corporation

First Avenue
and 27th Street
New York, N.Y. 10016

250th Anniversary

October 28, 1987

William S. Roper, M.D.
Administrator HCFA
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Md. 21202

Dear Dr. Roper:

Attached is the final report from BHC in response to the HCFA Medicare Mortality Survey. The following issues have also been identified in the report:

1. Hospital and patient characteristics
2. Limitations of HCFA model
3. Data Quality
4. Characteristics of deaths in categories in which the hospital exceeds the expected range.

Please publish the enclosed two (2) page attachment. The additional attached listing of data inclusive of HCFA discrepencies, is for informational purposes only.

Sincerely,

Harriet Dronska

Harriet Dronska
Executive Director

cc: Chris Burch

**BELLEVUE
HOSPITAL CENTER**
New York City
Health and Hospitals
Corporation
First Avenue
and 27th Street
New York, N.Y. 10016

PROVIDER #330204

BELLEVUE HOSPITAL CENTER

Bellevue, the oldest public hospital in the country, has an international reputation as one of the most complete medical centers in the world. Bellevue is a certified Heart Station, a Trauma center for head and spinal cord injuries and a major receiving center for implantation of severed limbs. Bellevue treats over 28,000 inpatients annually, most are Medicaid recipients (60%). Only 15% of its patient population has Medicare. Almost 90% of the Medicare patients are poor; 50% are black or non-white.

HCFA's study of Medicare mortality rates is based entirely on untested computer models that use only patient billing information. It does not include a medical chart review to determine if deaths were attributable to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for Bellevue's high risk patient population, such as severity of illness, patient race, socioeconomic status, and the existence and effect of multiple diseases on patient prognosis.

HCFA's results indicate that Bellevue Hospital's "actual" mortality rate falls within HCFA's overall predicted range. In only one of the 16 diagnostic categories, Severe Acute Heart Disease, did the actual mortality rate exceed HCFA's predicted range. Bellevue staff reviewed all

38 of the deaths reported by HCFA in this category to assess the severity of illness and to ensure that quality of care was provided.

SEVERE ACUTE HEART DISEASE

As a group these patients came to the hospital in acute distress with multiple health problems. Thirty-seven or ninety-seven percent of the 38 cases were admitted as emergency priorities. All were admitted through the emergency room. Twenty-six percent had five or more complicating diagnoses with an average of 3.9 secondary diagnoses per case including arrythmias, coronary artery disease, diabetes, hypertension, cardiogenic shock, past history of heart attack, and congestive heart failure. Seventy-nine percent died within 48 hours of admission; 71% died within 24 hours.

The result of this mortality review is a testimony to the fact that Bellevue delivers quality care to a high risk population. Bellevue will continue its ongoing review of medical records, including 100% review of inpatients deaths, as part of its comprehensive quality assurance monitoring program.

/asa

BHC MEDICARE MORTALITY DATA 1986

CATEGORY: Severe Acute Heart Disease

SERVICE : Medicine TOTAL # CASES: 38

A. DATA ANALYSIS

1. Admission Priority

Admission Priority	Total # Cases
a. Emergent	37
b. Elective	1
c. Transfer	0

2. Total # cases on ALOC = 0 Cases

3.

AGE RANGE	MALE	FEMALE	TOTAL
*60-64	1	0	1
65-69	8	2	10
70-74	3	2	5
75-79	7	1	8
80-84	6	3	9
85-89	2	0	2
90-94	1	2	3
TOTAL	28	10	38

*HCFA Data Discrepancy (HCFA Age = 76 BHC = 61)

4. Race Distribution

Category	# Cases
White	30
Black	3
Hispanic	4
Asian	1
Total	38

5. A. Total # cases admitted and expired the same day = 27 cases
   B. Total # cases length of stay greater than one day = 10 cases

   A. Cases that were admitted and expired within the same day = 27 cases

Breakdown of Time Spent in Emergency Services

Time Spent	# Cases
0 min. - 30 min.	13
31 min. - 1 hr.	7
1.5 hr. - 5.5 hrs.	0
6.0 - 6.5	1
6.5 - 7.0	0
7.0 - 7.5	1
7.5 - 8.0	1
8.0 - 9.5	0
9.5 - 10.0	1
10.0 - 11.0	0
11.0 - 11.5	1
11.5 - 15.0	0
15.0 - 15.5	1

   B. Length of stay (LOS) greater than one day = 10 cases

LOS Distribution	# Cases
1 day	2
2 - 5 days	3
6 -10 days	3
11 -15 days	0
16 -20 days	2
21 -25 days	1
Total	38

6. Total number of transfers from another institution = 0 cases

7. Total number cases that were unresponsive upon entry to the Hospital = 21 cases

8. Total number cases in which ER was source of admission = 38 cases (all cases)

9. Total number cases expired after discharge date = 0 cases

10. Total number cases with two or more secondary diagnosis identified = 22 cases

Common Secondary Diagnosis	Total No. Identified During Review
Hypertension	6
Diabetes Mellitus	7
Arrythmias	8
Coronary Artery Disease	8
Chronic Obstructive Pulmonary Disease	3
Etoh Abuse	Unspecified
Drug Abuse	Unspecified
Obesity	1
CVA	3
Renal Failure	2
Hypotension	3
Old M.I.	6
Congestive Heart Failure	5
Cardiogenic Shock	6

B. DATA DISCREPANCIES

1. Discharge Date : Date of Expiration

Patient ID Number (HIC)	Discharge Date HCFA/BHC	Date of Expiration HCFA/BHC
[redacted]	12/3/86 / 12/3/86	12/31/86 / 12/3/86
[redacted]	11/27/86 / 11/27/86	11/30/86 / 11/27/86
[redacted]	1/6/86 / 1/6/86	1/7/86 / 1/6/86

2. Age

Patient ID Number (HIC)	HCFA Age	BHC Age
[redacted]	88	87
[redacted]	69	66
[redacted]	66	65
[redacted]	76	61

3. Principal Diagnosis

Patient ID Number (HIC)	Principal Diagnosis HCFA	Principal Diagnosis BHC
[redacted]	4101	428.0
[redacted]	4109	410.1
[redacted]	4419	427.5
[redacted]	78551	427.5

JH/asa

BELLEVUE HOSPITAL CENTER

DATA DISCREPANCIES

1. Discharge Date : Date of Expiration

Patient ID Number (HIC)	Discharge Date HCFA/BHC	Date of Expiration HCFA/BHC
[redacted]	12/3/86 / 12/3/86	12/31/86 / 12/3/86
[redacted]	11/27/86 / 11/27/86	11/30/86 / 11/27/86
[redacted]	1/6/86 / 1/6/86	1/7/86 / 1/6/86

2. Age

Patient ID Number (HIC)	HCFA Age	BHC Age
[redacted]	88	87
[redacted]	69	66
[redacted]	66	65
[redacted]	76	61

3. Principal Diagnosis

Patient ID Number (HIC)	Principal Diagnosis HCFA	Principal Diagnosis BHC
[redacted]	4101	428.0
[redacted]	4109	410.1
[redacted]	4419	427.5
[redacted]	78551	427.5

BETH ISRAEL MEDICAL CENTER FIRST AVENUE AT 16TH STREET, NEW YORK, NY 10003 (212) 420-2000

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

In response to your release of September 21, 1987, Beth Israel Medical Center has reviewed the Medicare mortality data provided by the Health Care Financing Administration and we are submitting the following comments:

Although the Health Care Financing Administration has acknowledged that this information is not a complete measure of the quality of care at an individual hospital, it is difficult to imagine that these data would be useful for the individual consumer to make more informed decisions because:

1. The mortality analysis does not consider the type of acute care facility such as those approved to provide specialized services including cardiac surgery, trauma center designation, and the like, nor are institutions serving inner city populations whose mortality experience might be higher taken into account.

2. The methodology does not incorporate a severity of illness formula. For example, the Metabolic and Electrolytes Disorders Category includes diagnoses ranging from simple diabetes to hypoglycemic coma. Those facilities having great expertise in a particular mode of treatment will attract a disproportionate share of patients with potentially more severe stage of disease.

3. The report does not take into consideration the admission source such as emergency room, nursing home, or another acute care hospital. In a 15% random sample of patients listed in the report we found that 98% came through our emergency room or directly from another facility. These patients would clearly be expected to be severely ill and have a high mortality.

To determine the accuracy of the data presented in the report, we have carefully reviewed every case. Our findings are as follows:

1. One case reported was not known to Beth Israel Medical Center based on the identifying information provided in the HCFA report.
2. The report stated that 18% of the patients died post-hospitalization when in fact only 11% died outside the hospital.
3. The date of death was incorrect in 29 cases. The date of admission was incorrect in 1 case. In two cases the report stated that the patients died outside the hospital when actually the patients died in the hospital during a subsequent admission.
4. There were instances in which the last and first names were switched. Because of the format of the report it was difficult to identify some of the patients. It is strongly recommended that the patient's medical record number and date of birth be provided in future reports.

We chose to contact the primary physician for a random sample of patients identified as having died post-hospitalization. These physicians advised us, in all instances, that the patient's death was anticipated.

We have great difficulty viewing these data as an index of quality. Beth Israel Medical Center has had in place for many years a quality assurance program which includes extensive physician peer review of all deaths. In fact, our medical center has some 56 committees and subcommittees which, on an ongoing basis, review a wide range of quality issues that encompass all aspects of patient care, not simply mortality. We believe that utilizing raw mortality data as a single indicator of the quality of care rendered by a hospital is extremely limited at best and does not reflect the outcome of services provided for all our patients.

We appreciate the opportunity to review the Health Care Financing Administration mortality data and trust that these comments will be given consideration in future reports.

Sincerely yours,

Robert G. Newman

Robert G. Newman, M.D.
President

RGN/ls

NEW YORK STATE
OFFICE OF MENTAL HEALTH

STEVEN E. KATZ, M.D., Commissioner

BINGHAMTON PSYCHIATRIC CENTER

LOUIS DOZORETZ, M.D., Director

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Hospital ID Number: 330371

Thank you for the opportunity to review mortality information about Medicare patients treated in our hospital in 1986. We have the following concerns about the data submitted:

We are a psychiatric hospital with a medical unit so our principal diagnoses are psychiatric. All of the 799.9 were incorrectly listed; we have checked our index and find the diagnoses to be 290.00, 290.00, 290.00, 295.62, 295.62, 290.00, 290.00 and 290.00 respectively. In addition, the date of death for patient ID number [redacted] should have been 01/23/86.

We hope this information helps to clarify our data.

Sincerely,

Dorothy Erney

Dorothy Erney, RRA
Supervising Medical Record Administrator

FOR Louis Dozoretz, M.D.
Director

425 Robinson Street, Binghamton, New York 13901 ● (607) 724-1391

BOOTH MEMORIAL MEDICAL CENTER
A voluntary, non-profit 467-bed Medical Center
Main Street & Booth Memorial Ave. Flushing, New York 11355 • (718) 670-1231

Medicare Provider #330055

HCFA 1986 MORTALITY INFORMATION RESPONSE STATEMENT

Booth Memorial Medical Center is a 467 bed Voluntary, Acute, General, Teaching Hospital located centrally in the county of Queens, New York. Serving a region of approximately two million people, Booth Memorial provides many tertiary level services to the community it serves.

Even with the significant aging population we serve and in view of the amount of high technology, critical care services we provide, Booth Memorial fell within the predicted range for each and every diagnostic category.

Although we were within the predicted range of the Pulmonary Disease category, Booth Memorial would like to comment on our actual mortality rate. Having scored a rate of 29% in a range that extended from 18% to 30%, we would like to identify factors that impacted on this high score. After reviewing the data, it is our consensus that due to the fact that the Medical Center maintains a dedicated Respiratory Intensive Care Unit consisting of eight (8) beds, and the Medical Staff has twenty (20) physicians who specialize in Pulmonary Medicine, Booth Memorial tends to more frequently diagnose and treat a more critically ill patient as it relates to this disease category. This appears to account for our actual rate in this category.

THE NEW YORK CITY HEALTH AND HOSPITALS CORPORATION
BRONX MUNICIPAL HOSPITAL CENTER
AFFILIATED WITH ALBERT EINSTEIN COLLEGE OF MEDICINE
PELHAM PARKWAY SOUTH AND EASTCHESTER ROAD, BRONX, NEW YORK 10461
(212) 430-5161

**OFFICE OF THE
EXECUTIVE DIRECTOR**

October 28, 1987

Mr. William S. Roper
Administrator HCFA
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Mr. Roper:

Attached is our response to the anticipated release of Medicare mortality data by your agency in December 1987. We urge you to print the response in its entirety since it provides necessary information for the interpretation of the statistics by the general public.

Attached to this response is a separate page listing the errors we found with the data after our chart reviews. This, as well as this cover letter, is for your use only and not intended to be part of our official response for publication.

Sincerely,

Frank J Maddalena

Frank J. Maddalena
Executive Director

FJM/pc
attachment

New York City
HEALTH AND HOSPITALS CORPORATION
BRONX MUNICIPAL HOSPITAL CENTER
AFFILIATED WITH
ALBERT EINSTEIN COLLEGE OF MEDICINE
PELHAM PARKWAY SOUTH AND EASTCHESTER ROAD
BRONX, NEW YORK 10461

BRONX MUNICIPAL HOSPITAL CENTER MEDICARE PROVIDER NUMBER 330127

Bronx Municipal Hospital Center has a reputation as a innovator and leader in emergency medicine. The hospital combines a full range of health care and emergency services with specialties in chest medicine, metabolic research and drug and alcohol detoxification. BMHC is a level I Trauma Center and has a Burn Unit with the second largest caseload in the city. It provides inpatient care to 25,805 patients utilizing 241,610 inpatient days, has 63 clinics and has 128,000 emergency room visits annually.

HCFA's study of Medicare mortality rates is based entirely on untested computer models and billing information and does not include a medical chart review to determine if deaths were attributable to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for BMHC's high risk patient population such as severity of illness, patient race, socioeconomic status, and the effect of multiple diseases on patient prognosis. As examples, 62% of BMHC's Medicare patients are poor, 47% are black or non-white, 91% are admitted as emergencies and 19% require more than one admission a year.

Data Quality

HCFA's files contain 88% of BMHC's deaths but only 77% of its total Medicare patients which inflates HCFAS's "actual" death rates.

	Cases	Deaths	Death Rate
HCFA Report	2596	390	15%
Medicare Paid Claims	3378	426*	13%

*Includes deaths after discharge.

An under-reporting of cases also inflates BMHC's mortality rate in the cerebrovascular accident category in which the "actual" rate appears to be over the HCFA predicted range. Using more complete billing data BMHC falls well within HCFA's predicted range. We urgently request that the "actual" rates be corrected before the study's publication. We are willing to supply paid claims files to support our counts.

Nevertheless, we reviewed a sample of all death cases reported by HCFA to ensure that quality care was provided.

Cerebrovascular Disease

(22 out of 46 reviewed) 14% (3 cases) were transferred from another facility in an unresponsive state and an additional 27% (6 cases) were neurologically decompensated and unresponsive on admission. 47% of the deaths had 5 or more secondary diagnoses indicative of a severely ill patient population. Secondary diagnoses in this category included pneumonia, cerebral edema, and acute myocardial infarction.

Trauma

(14 of 14 reviewed) 3 patients (21%) were admitted with severe burns over 85% of their body. One patient was transferred from another facility with multiple trauma. Of the remaining 10, 30% had not sought medical evaluation until 2 days after the trauma had occurred. 67% of the deaths had 5 or more secondary diagnosis.

BMHC will continue its efforts to improve health outcomes for all its patients. Its ongoing review of medical records and 100% review of all patients deaths will continue as part of a comprehensive quality assurance monitoring program.

New York City

HEALTH AND HOSPITALS CORPORATION
BRONX MUNICIPAL HOSPITAL CENTER
AFFILIATED WITH
ALBERT EINSTEIN COLLEGE OF MEDICINE
PELHAM PARKWAY SOUTH AND EASTCHESTER ROAD
BRONX, NEW YORK 10461

ERROR LISTING

Errors identified in HCFA mortality data for 1986 for Bronx Municipal Hospital Center:

Of the 40 deaths identified by HCFA as deaths after discharge, nine (9) were in error. Eight (8) of those deaths occurred within our facility during the stay. The ninth death was erroneous because it turned out to be a 23 year old OB patient who was seen in one of our clinics three weeks after the alleged HCFA death date, and is currently alive and well.

366 Broadway / Amityville, New York 11701 / Brunswick Hospital Center / 516 789-7000

October 9, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Baltimore, Maryland 21207

Dear Doctor Roper:

I am in receipt of the 1986 Mortality Statistics for Brunswick Hospital Center, Provider #330314.

Please be advised that our review corroborates with your report.

Very truly yours,

BRUNSWICK HOSPITAL CENTER, INC.

Benjamin M. Stein, M.D.
President

BMS:al

Five coordinated hospitals . . . General / Rehabilitation (physical medicine) / Psychiatric / Nursing Home / Alcoholism Treatment Center

Buffalo
PSYCHIATRIC CENTER

PATRICIA T. OULTON
Executive Director
Amarjit Grewal, M.D.
Clinical Director, Inpatient Services (Acting)
Stacey S. Calhoun
Director, Community Services
Robert A. Coffey
Director, Facility Administrative Services
Richard C. Panell
Director, Quality Assurance

400 Forest Avenue
Buffalo, N.Y. 14213-1298
(716)885-2261

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Hospital Mortality Rates
Provider #330368

Dear Dr. Roper:

I am writing in response to your September 21, 1987 letter regarding the mortality rates at the Buffalo Psychiatric Center. Your report indicates that you are going to publish selected mortality information about all short term acute care hospitals which treated medicare patients in 1986. Your report also indicates that during that time there were seven (7) patients who had died within 30 days of admission.

I have reviewed the information in the report and would like to make the following comments:

(1) The Buffalo Psychiatric Center is not a short term acute care hospital, but rather a psychiatric center treating the chronically disabled.

(2) Of the seven (7) names included in your report, the first name (surname [redacted] has not been a patient in our facility. In addition, the patient Id Number you reported is the same as the second patient, [redacted] who was a patient at our Center.

(3) Most importantly, none of the patients in the list in your report died within 30 days of admission. Please note the following:

Patient Id. #	Date of Most Recent Adm. Prior to Death	Date of Death
[redacted]	6/1/81	8/13/86
[redacted]	2/27/76	12/17/86
[redacted]	10/4/85	6/27/86
[redacted]	2/28/86	11/8/86
[redacted]	3/9/82	9/15/86
[redacted]	4/2/80	7/5/86

The discrepancy between the information in your report and our information, may be caused by the fact that the "date of admission" may be the actual date of transfer between a psychiatric ward within our facility and the medical ward within our facility.

I would appreciate it if the above was noted prior to publication of the mortality rates.

Sincerely,

Patricia T Oulton

PATRICIA T. OULTON
EXECUTIVE DIRECTOR

PTO:RP:maj
a:mortrate.rp/4

227 EAST NINETEENTH STREET, NEW YORK, N.Y. 10003 (212) 725-6000

A MAJOR TEACHING AFFILIATE OF NEW YORK MEDICAL COLLEGE

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Medicare Provider #330133

Dear Dr. Roper,

We have received the materials prepared by the Health Care Financing Administration (HCFA) pertaining to selected mortality information about Medicare patients treated at Cabrini Medical Center during 1986 (refer to Attachment #1). Outlined below is an overview of the methodology used by Cabrini Medical Center to review the HCFA data, and a list of the inconsistencies between the HCFA data and the information in the medical record of those patients treated at Cabrini Medical Center.

The accuracy of the hospital-specific data prepared by HCFA was verified by Cabrini Medical Center in two ways. A random sample of thirty cases was selected and reviewed by staff of the Medical Records Department. Each of the data elements on the HCFA form was compared with the information in the medical chart, and all inconsistancies were noted. The hospital also examined all cases in which the date of death and the date of discharge were different (a total of 15). The medical charts were reviewed by physicians in the respective clinical departments. While this process did reveal a number of errors in the HCFA data, no problems were identified by the reviewing physicians relative to the quality of medical care provided.

Page two of this letter contains a summary of the inconsistancies we have identified between the hospital-specific data as reported by HCFA, and the information contained in the medical record. It is important to note that one of the patients reported by HCFA as dead is still alive and was, in fact, readmitted to Cabrini Medical Center on 05/12/87.

A facility of the Missionary Sisters of the Sacred Heart

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Re: Medicare Provider #330133

With regard to the sepsis case included in the Cabrini Medical Center profile, we would like to note that because only one case was used to determine the "Actual Mortality Rate" for this diagnostic category, the resultant 100% "Actual Mortality Rate" for sepsis is statistically difficult to interpret. Again, the handling of this case was reviewed by physicians in the appropriate clinical specialty and found to be consistent with accepted standards of medical practice.

Thank you for the opportunity to review and correct the Cabrini-specific HCFA Medicare mortality data. Should you have any questions or require additional information, please feel free to contact Lori Lupinski, Assistant to the Executive Vice President, at (212)995-6777.

Sincerely,

Jeffrey Frerichs
Executive Vice President

JF/le
Attachment
cc: Sr. Josephine Tsuei, M.S.C. - President

20th Anniversary
As A Caring
Multi-Hospital System

Catholic Medical Center of Brooklyn and Queens, Inc.

88-25 153RD STREET, JAMAICA, NEW YORK 11432 . . . . (718) 657-6800

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: HCFA Mortality Study Hospital Response

Gentlemen:

In reference to your letter of September 21, 1987, we are submitting the following response to the release of mortality information:

> "The Catholic Medical Center of Brooklyn and Queens, Inc. as a diversified multi-hospital system, is proud of its long standing reputation for providing the community it serves throughout the City of New York with outstanding patient care. We believe that the identification of a statistical discrepancy in one diagnosis out of seventeen is invalid and is unrelated to the caliber of patient care."

As requested, our Provider Number is 330357.

Very truly yours,

Alvin Conway

Alvin J. Conway
President

AJC:jk

HOSPITAL OF THE HOLY FAMILY • SAINT JOHN'S QUEENS HOSPITAL • SAINT JOSEPH'S HOSPITAL • SAINT MARY'S HOSPITAL OF BROOKLYN • MARY IMMACULATE HOSPITAL
MONSIGNOR JAMES H. FITZPATRICK PAVILION FOR SKILLED NURSING CARE

A MAJOR TEACHING AFFILIATE OF CORNELL UNIVERSITY MEDICAL COLLEGE AND NEW YORK HOSPITAL

CGH

CENTRAL GENERAL HOSPITAL INC.
888 OLD COUNTRY ROAD · PLAINVIEW, L.I., NEW YORK 11803

ROBERT J. BORNSTEIN, F.A.C.H.A.
ADMINISTRATOR

(516) 681-8900

October 7, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

There are thirty-nine names of patients which have been noted to have expired after discharge from Central General Hospital.

Of the thirty-nine listed, there are only two who died at Central General Hospital. One was DOA (Dead on arrival) and the other died in the Emergency Room. They are as follows:

HIC [redacted] [redacted] DOD 12/27/86 ER
HIC [redacted] [redacted] DOD 10/9/ 86 DOA

We do not have a record of the remaining thirty-seven names and would appreciate a response as to why these were designated as Central General Hospital deaths.

Please note attached list..

Very truly yours,

Robert J. Bornstein
Administrator

RJB/rl

20th Anniversary
As A Caring Multi-Hospital System

Catholic Medical Center of Brooklyn and Queens, Inc.

88-25 153RD STREET, JAMAICA, NEW YORK 11432 . . . . (718) 657-6800

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
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P.O. Box 26684
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As requested, our Provider Number is 330357.

Very truly yours,

Alvin Conway

Alvin J. Conway
President

AJC:jk

HOSPITAL OF THE HOLY FAMILY • SAINT JOHN'S QUEENS HOSPITAL • SAINT JOSEPH'S HOSPITAL • SAINT MARY'S HOSPITAL OF BROOKLYN • MARY IMMACULATE HOSPITAL
MONSIGNOR JAMES H. FITZPATRICK PAVILION FOR SKILLED NURSING CARE

A MAJOR TEACHING AFFILIATE OF CORNELL UNIVERSITY MEDICAL COLLEGE AND NEW YORK HOSPITAL

CGH

CENTRAL GENERAL HOSPITAL INC.
888 OLD COUNTRY ROAD · PLAINVIEW, L.I., NEW YORK 11803

ROBERT J. BORNSTEIN, F.A.C.H.A.
ADMINISTRATOR

(516) 681-8900

October 7, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

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HIC [redacted] [redacted] DOD 10/9/ 86 DOA

We do not have a record of the remaining thirty-seven names and would appreciate a response as to why these were designated as Central General Hospital deaths.

Please note attached list.

Very truly yours,

Robert J. Bornstein
Administrator

RJB/rl

LIST OF DEATHS AFTER DISCHARGE FROM CENTRAL GENERAL HOSPITAL

Pt. ID # HIC	Surname	Diag Cat.	Date of Death
[redacted]	[redacted]	CA	8/27/86
[redacted]	[redacted]	CA	11/8/86
[redacted]	[redacted]	CA	12/2/86
[redacted]	[redacted]	CA	6/16/86
[redacted]	[redacted]	CA	3/31/86
[redacted]	[redacted]	CE	11/22/86
[redacted]	[redacted]	GI	9/9/86
[redacted]	[redacted]	GI	3/12/86
[redacted]	[redacted]	HM	8/1/86
[redacted]	[redacted]	HM	9/27/86
[redacted]	[redacted]	HS	11/14/86
[redacted]	[redacted]	PN	4/3/86
[redacted]	[redacted]	PN	10/10/86
[redacted]	[redacted]	PN	4/4/86
[redacted]	[redacted]	RN	5/6/86
[redacted]	[redacted]	SE	5/31/86
[redacted]	[redacted]	UN	6/30/86
[redacted]	[redacted]	UN	10/6/86
[redacted]	[redacted]	UN	5/8/86
[redacted]	[redacted]	UN	4/7/86
[redacted]	[redacted]	UN	7/15/86
[redacted]	[redacted]	UN	11/20/86
[redacted]	[redacted]	UN	12/8/86
[redacted]	[redacted]	UN	6/20/86
[redacted]	[redacted]	UN	2/16/86
[redacted]	[redacted]	UN	11/15/86
[redacted]	[redacted]	UN	2/6/86
[redacted]	[redacted]	UN	3/15/86
[redacted]	[redacted]	UN	12/5/86
[redacted]	[redacted]	UN	6/21/86
[redacted]	[redacted]	GU	1/4/87
[redacted]	[redacted]	HM	1/16/86
[redacted]	[redacted]	UN	1/18/86
[redacted]	[redacted]	UN	1/13/87

CVPH

CHAMPLAIN VALLEY PHYSICIANS HOSPITAL
MEDICAL CENTER
PLATTSBURGH • NEW YORK • 12901

KEVIN J. CARROLL
PRESIDENT

October 13, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper:

CVPH Medical Center has reviewed the hospital specific mortality data that has been provided to us by HCFA. While the statistics for CVPH fall well within the range of predicted mortality rates for all causes and for fourteen of the sixteen DRG's selected for the study, we nevertheless want to express our serious reservations about the validity of the model and about the release of such data to a public that may easily infer that it has been given a quality indicator of hospital care, when that clearly is not a justifiable assumption.

Statistics can certainly be helpful to hospitals if they make us ask important questions, such as the cause for differences between predicted and actual mortality rates. The answers, however, come from the analysis of individual cases to ascertain that appropriate care was given in view of all of the relevant information about the patient. Medical review organizations, both internal and external to the hospital, already perform that function.

The release of the mortality statistics into the public domain, on the otherhand, is not useful to hospitals, nor is it useful to the public. The complicated statistical model used by HCFA, which has not been validated, is not easily understood by average readers. Nor are they aware of some of the questions we in the industry are still asking, such as: Is it valid to take account of age and sex but not reason for admission to the hospital? Is one year's worth of data sufficient for making a judgment or is a longer term progression of statistics essential? And the question that is most appropriate of all to ask: Is a mortality statistic for one year in any way indicative of quality?

You know as surely as we do that the public will assume that the answer to that last question is, "Yes." You also know as surely as we do that the answer is, "Not necessarily." You do a great disservice to the public and to hospitals by allowing the implication to arise that a mortality statistic balanced against a computer projection is a reasonable basis for evaluating a hospital's standard of patient care, and you plant major misperceptions in the public's mind that will demand a large commitment of time and effort on the part of hospitals to correct.

Quality of care is important. Evaluating it and communicating the evaluation are essential. We firmly believe, however, that the issuance of mortality data is neither essential nor proper.

Sincerely,

Kevin J. Carroll
President

/dml

cc: Daniel Sisto, President
Hospital Association of New York State

City Hospital Center at Elmhurst
79-01 BROADWAY ELMHURST, NY 11373

1832-1982
150
YEARS
OF PUBLIC
SERVICE

October 27, 1987

William L. Roper, M.D.
The Administrator
Health Care Financing Administration
Washington, D.C. 20201

Re: Hospital ID Number: 330128

Dear Dr. Roper:

Attached please find City Hospital Center at Elmhurst's response to the Medicare Mortality data release This letter is not part of the release.

As described in the Elmhurst release, we believe there are severe deficiencies in the data from both a qualitative and quantitative perspective. The reported data understates Elmhurst's Medicare discharges for 1986 and fails to take into consideration the pre-hospital condition of the patient, the patient's socioeconomic status, the patient's life style, the patient's support system, or the patient's cultural background.

It is also important to note that the Elmhurst community is described as the most ethnically and culturally diverse community in the country. This "melting pot" contains Hispanics from many of the South American and Carribean countries. Many Asian and European countries are represented in this community along with a large Indian population. The breadth of cultures represented compound the use of health services prior to an acute event thereby presenting the hospital with a patient in an already compromised state. The data presented by HCFA does not begin to take this issue into account.

Thank you for the opportunity to comment on the 1986 Mortality Study prior to its release.

Sincerely,

Alan H. Channing
Executive Director

AHC:bs
Attachment
cc: Health Care Financing Administration
Health Standards and Quality Bureau

Hospital Mortality Information

CITY HOSPITAL CENTER AT ELMHURST

Elmhurst Hospital Center, one of only two level one trauma centers serving Queens, receives 100,000 Emergency Room (ER) visits annually. Elmhurst is a designated Emergency Heart Station and is the primary receiving center for patients in acute heart distress. The hospital has an end-stage renal disease program, a respiratory intensive care unit and an active geriatric program. Each year Elmhurst has 19,116 admissions and treats a high proportion of patients in compromised conditions due to trauma or other life-threatening illnesses.

HCFA's study of Medicare mortality rates is based entirely on untested computer models and billing information and does not include a medical chart review to determine if deaths were attributed to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for Elmhurst's high risk patient population, such as severity of illness, cultural approach to health care, socioeconomic status, and the existence of multiple diseases and their effect on a patient's lifestyle.

DATA QUALITY

HCFA's files contain 92% of Elmhurst's deaths but only 87% of its total Medicare patients which inflates HCFA's "actual" death rates. This underreporting also inflates Elmhurst's mortality rates in 3 diagnostic categories in which the "actual" rate appears to be over the HCFA predicted range. Using more complete billing data, Elmhurst is not over the predicted range in the categories of Severe Acute Heart Disease, Cerebrovascular Accidents (Stroke) or Pulmonary Disease.

We urgently request that updated information be made available in the HCFA publication. We are willing to supply paid claims files from Medicare's fiscal agent to support our counts.

Nevertheless, we reviewed a sample of deaths reported by HCFA to assess the severity of the patients' conditions and to ensure that quality care was provided. The APACHE I chronicity evaluation tool was used to determine the degree of impairment caused by the patient's health problems 3-6 months before admission. Patients with the highest degree of impairment (i.e., severely limited in activity) include those who were bedridden, those unable to work because of their illness or those manifested multiple pre-existing medical problems.

OVERALL ANALYSIS

The high risk characteristics of the overall population served by Elmhurst is demonstrated by an age-adjusted mortality for its primary service area that is 57% higher than the national average and a heart disease mortality rate that is 100% higher. Almost half the Medicare patients have either no secondary insurance or only Medicaid, indicative of a high proportion of the economically disadvantaged. 95% of the patients were admitted as emergencies. 30% of the deaths occurred within 24 hours. 17% required admission more than once a year.

SEVERE ACUTE HEART DISEASE

48% of the deaths occurred within 24 hours of admission. These cases arrived by ambulance after suffering massive heart attacks. The chronicity evaluation indicated that 20% of these patients were severely limited in activity or incapacitated before admission. 51% of these cases had three or more co-morbidities including cancer, long term hypertension and previous heart attacks.

CEREBROVASCULAR ACCIDENTS

The chronicity evaluation indicated that 37% of these patients were severely limited in activity or incapacitated before admission. 85% were 80 or older. 43% of the deaths had five or more secondary diagnoses; an additional 41% had 3-4 secondary diagnoses.

PULMONARY DISEASE

12.5% of the deaths had been transferred in. One patient signed out against medical advise and subsequently died. 24% (13) patients died within 24 hours of admission, indicative of the severity of their illness. The chronicity evaluation indicated that 48% were severely limited in activity or incapacitated upon admission. 41% of the deaths had five or more secondary diagnses; 45% of the patients had 3-4 secondary diagnoses.

GASTROINTESTINAL CATASTROPHIES

Although HCFA describes patients in this category as "low risk", 53% were severely ill or incapacitated before admission to the hospital and 40% were admitted through the Emergency Department, indicative of both multiple and serious health problems. 52% of the deaths had five or more secondary diagnoses. Comorbidities included chronic obstruction pulmonary disease, congestive heart failure, gangrene, renal failure, septic shock and hepatic failure.

LOW RISK HEART DISEASE

43% of the cases died within 24 hours of admission and 75% had 3 or more secondary diagnoses. The majority of patients were over age 80.

Elmhurst Hospital will continue its efforts to improve health outcomes for all its patients. Its ongoing review of medical records includes a 100% review of all patient deaths as part of the hospital's comprehensive quality assurance monitoring program.

Clifton Fine Hospital
Star Lake, New York

Provider Number: 33-0179

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

Columbia Memorial Hospital
71 Prospect Ave., Hudson, NY 12534•518-828-7601

October 27, 1987

MEDICARE PROVIDER NO. 330094

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

I am responding on behalf of Columbia Memorial Hospital relative to the mortality listings provided for Columbia Memorial Hospital for the year 1986.

Our first comments will relate to why specific diagnostic categories experienced varying levels of mortality at our facility and the second section will be devoted to the inaccuracy of mortality data..

With regard to the specific mortality rates by diagnostic category and factors which may have contributed to variances in mortality data for our hospital compared to others, we have identified a number of factors which we feel may have caused impact. They are as follows:

1. The age of the population in our primary service area is very high compared to national and state averages. Of the deaths recorded at our hospital, 24 were for individuals 90 years and older, 99 were for individuals 80 years and older, and 182 were for individuals 70 years and older. You will note that these age groupings therefore yielded 11 percent of deaths for those 90 and over, 44 percent of deaths for those 80 and over, and 81 percent of deaths for those 70 and over. It is widely recognized that age is a major contributing factor to higher morbidity and mortality due to the likelihood of the patient developing severe chronic and acute conditions multiple in number.

2. With respect to cancer deaths, our mortality rate is within range but slightly above the mid-point of the range due to several factors:

    A. The advanced age of the population of patients treated has proven to result in a higher morbidity and mortality for the patients within this diagnostic category.

B. The more curable cases of cancer initially treated in our hospital must sometimes be referred to other hospitals or medical centers which offer forms of treatment not available at our facility. This would include those cases requiring linear accelerator treatment or other specialized services beyond our capability. This, therefore, results in our hospital treating a higher proportion of cases that have a poor prognosis and the cases with a better prognosis are transferred to other facilities on a proportinately higher basis.

3. Poor transportation services in our primary service area may also have contributed to some of the patients experiencing greater severity of illness upon admission since those without personal transportation are not readily able to seek treatment initially or to return for follow up treatment and therapy.
Limited availabily of non-emergent transportation also leads to patients being somewhat reluctant to call ambulance squads for assistance and also contributes to a higher morbidity and mortality for some diagnostic categories.
4. A lack of primary care medical practitioners in the more isolated and remote regions of our primary service area also contributes to higher morbidity and mortality since the patients are unable to enter the medical care system and, especially for those without personal transporation, they are unable to be followed closely by private physicians and their conditions, therefore, are not as well managed as they might be. Early intervention does occur in many cases.

Our medical staff feels that the mortality rates for some of the diagnostic categories are low when considering the factors we have discussed earlier:

1. Age of population.

2. Poor transporation.

3. Lack of a far reaching organized ambulatory care system.

With respect to data, we determined that there were several errors in the mortality information provided to the hospital as follows:

1. Patient [redacted] had an incorrect date of death.

2. Patient [redacted] had an incorrect date of death.

3. Patient [redacted] had an incorrect date of death.

4. Patient [redacted] was dead on arrival at the hospital.

5. Patient [redacted] had an incorrect diagnostic category and an incorrect principal diagnosis.

6. Patient [redacted] had an incorrect diagnostic category and an incorrect principal diagnosis.

7. Patient [redacted] was dead on arrival.

8. Patient [redacted] had an incorrect date of death.

9. Patient [redacted] had an incorrect diagnostic category and an incorrect principal diagnosis and incorrect principal procedure.

10. Patients [redacted] and [redacted] both were dead on arrival.

11. Patient [redacted] had an incorrect date of death.

12. Patient [redacted] had an incorrect date of death.

13. Patient [redacted] was dead on arrival.

14. Patient [redacted] had an incorrect date of death.

15. Patient [redacted] had an incorrect date of death.

16. Patient [redacted] had an incorrect date of death.

17. Patient [redacted] had an incorrect age listed.

18. Patient [redacted] had an incorrect diagnostic category and an incorrect principal diagnosis.

19. Patient [redacted] was dead on arrival.

20. Patient [redacted] had an incorrect principal diagnosis.

21. Patient [redacted] had an incorrect diagnositic category,incorrect date of admission, incorrect date of discharge and incorrect principal diagnosis.

From the aforementioned 30 errors we conclude that there is some question about the reliability of the data utilized in preparing the report relative to Columbia Memorial Hospital and would be pleased to provide you with corrected information if you would like it.

In summary, our overall mortality rate of 13% falls slightly below the middle of the expected or predicted mortality rate for hospitals of our size and case mix. We feel the low rate is reflective of the quality of services provided at our facility in spite of the aged population we serve and the multiple acute and chronic conditions they seek treatments for.

The very low mortality rate for some of the categories is also reflective of the quality of in-hospital services provided by our medical staff, nursing staff and other patient care providers. This, coupled with the tremendous efforts of the volunteer rescue squads and the emergency department staff at our hospital contributes to somewhat lower than expected actual mortality rates in some of the diagnostic categories.

Sincerely,

Alexander Stetynski, Jr.
President

e

Community-General Hospital

COMMUNITY-GENERAL HOSPITAL OF GREATER SYRACUSE
BROAD ROAD SYRACUSE NY 13215
(315) 492-5011

Medicare Provider 330159

In response to the request by William L, Roper, M.D., Administrator, Health Care Financial Administration (HCFA), the following observations and information are provided on the mortality data information compiled and released by HCFA:

A. Observations

HCFA's report shows Community-General Hospital's overall mortality rate, and its mortality rates in 16 general categories, are well within the ranges predicted by HCFA for the Hospital's Medicare patients during 1986.

Despite this favorable report, Community-General Hospital is concerned that HCFA figures may lead to snap judgments "comparing" hospitals or "ranking" the mortality rates of several hospitals. This would be a serious mistake because HCFA-calculated ranges are based on hospitals' individual mix of patients and are therefore different for each hospital. For a meaningful comparison two hospitals would need to have identical patient populations (numbers, ages, etc.).

Furthermore, the method used by HCFA in determining the mortality rate ranges has very limited significance for a number of reasons, including:

1. The statistical formula used by HCFA, although highly complex, has not been technically validated and cannot definitely attribute patient deaths to hospital care.

2. HCFA's formula does not consider all factors that influence a patient's risk of death -- for example, neither the severity of illness nor the patient's health status is considered.

3. The HCFA formula is based on the principal diagnosis, which is not necessarily the same as the cause of death. For instance, patients with circulatory problems frequently experience respiratory or renal problems which could be a cause of death -- not the underlying circulatory disorder which is coded on the Medicare billing forms HCFA uses in compiling its information.

4. HCFA's diagnostic categories are overly broad, and therefore not relevant to an individual who may be interested in assessing mortality for specific diagnosis. For example, there are numerous types of cancer, chronic heart disease, and strokes, which have widely varying mortality rates within a single HCFA

category. It is, therefore, very difficult for an individual to use the broad HCFA categories for any meaningful conclusion about a specific diagnosis.

B. Information Review

A review of the case-by-case HCFA information for Community-General Hospital revealed the following:

1. HCFA 1986 Medicare Mortality Cases	338
. Percentage of HCFA-Reported Cases Confirmed by Hospital	100%
. Cases with Discrepancies (incorrect patient identification number, discharge date, or date of death)	8.5%
. Cases individually reviewed by Hospital	15.0%
2. Of those individually reviewed, cases in which death could not be confirmed (i.e., patient discharged living)	13.7%
3. Of those individually reviewed, cases in which HCFA principal diagnosis did not accurately describe cause of death	66.6%

C. Conclusion

The HCFA report may create the mistaken impression that HCFA is the only organization concerned with hospital quality or that mortality data is the only, or even the best, way to study quality of care.

Community-General Hospital fully cooperates with the many external organizations which review hospital care -- specifically, the Joint Commission on the Accreditation of Healthcare Organizations, the New York State Health Department, the State Peer Review Organization, Blue Cross, and the insurance companies which have their own quality assessment programs.

For all the of the above reasons, Community-General Hospital underscores and endorses the words of HCFA administrator William L. Roper, M.D.: "...the [HCFA] information on its own is not a complete measure of the quality care at an individual hospital."

Submitted by
Martin M. Black, M.D.
Vice President - Professional Affairs
Community-General Hospital of Greater Syracuse
October 21, 1987

COMMUNITY GENERAL HOSPITAL OF SULLIVAN COUNTY

HOSPITAL PROVIDER #330386 and #330359

COMMENTS ON HCFA MORTALITY DATA

We are pleased that the HCFA Mortality Study conclusively demonstrates the fine quality of care provided by Community General Hospital to Sullivan County residents, visitors and transients. The statistics for the Hospital indicate that it is significantly below the average expected mortality for elderly Medicare patients in fifteen of the sixteen major categories evaluated by the Federal Government. Overall, the study shows Community General Hospital of Sullivan County, New York, in approximately the 90th percentile of survivability.

The Hospital's slight variance in cancer mortality, although not statistically significant, is attributable to Community General Hospital's working closely with Friends to Form Hospice of Sullivan County, resulting in caring for many terminally ill cancer patients who prefer death with dignity rather than active intervention.

The overall survivability rate, however, is especially noteworthy since Community General Hospital of Sullivan County, as a rural, sole community provider, cares for a large number of advanced age elderly who are admitted in a terminal condition because of lack of family support and insufficient nursing home beds. The statistics, because of the County's resort environment, also included numerous out of area residents whose previous medical history was not available to the Hospital's Medical and Nursing staffs. And, while the HCFA statistics have been age adjusted, it is significant to note that nearly twenty percent of the patients included for Community General Hospital were in the 88- to 107-year age range.

COMMUNITY GENERAL HOSPITAL OF SULLIVAN COUNTY

HOSPITAL PROVIDER #330386 and #330359

COMMENTS ON HCFA MORTALITY DATA

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Community Hospital of Schoharie County
Cobleskill, New York 12043 (518)234-2511

November 2, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington DC 20201

Dear Dr. Roper:

We would like to comment on the mortality information on Medicare patients which the Health Care Financing Administration plans to publish in December, 1987.

The Health Care Financing Administration's decision to include all patients who expired within 30 days after discharge from the institution disregarded the fact that these deaths may have been completely unrelated to the condition for which the patient was admitted to the hospital.

It is also clear that severity of illness was not taken into account and is unfair to those hospitals which have a high rate of patients who are severely ill.

In addition, a hospital which has a population that is largely elderly might have a higher death rate than those hospitals who treat a younger population.

There is no clear evidence that the data used in this study can detect differences in quality of care.

It is unfortunate that this information which deals with "complex issues" should be presented to the average consumer who may not readily understand and who may incorrectly interpret the data.

Very truly yours,

Howard J. Archer

Howard J. Archer
Administrator

HJA:rd

"The Center for Health Care in Schoharie County"

CH
COMMUNITY
HOSPITAL
OF WESTERN SUFFOLK
AN AFFILIATE OF THE NEW YORK HOSPITAL — CORNELL MEDICAL CENTER

Glenn Hirsch
Administrator

October 27, 1987 FEDERAL EXPRESS

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 309-G
200 Independence Avenue, S.W.
Washington, D. C. 20201

Dear Dr. Roper:

Attached please find the Hospital's comments pertaining to our institution's mortality statistics which you have shared with us.

Additionally, per your request, our Medicare Provider number is #330309.

While we have forwarded our original comments and responses to the Post Office box number as directed in your instructions, we have also forwarded a duplicate copy directly to your attention, return receipt requested. We have done this since we have been advised that there could be a problem in our receiving such verification of receipt directly through delivery to a Post Office box.

Should you have any questions, please feel free to contact either Mrs. Pat Kelt, Director of Quality Assurance, or myself.

Sincerely,

Glenn Hirsch

Glenn Hirsch
Administrator

GH:lt
Enclosures
cc: Pat Kelt, Director of Quality Assurance

Smithtown Bypass & Route III, Smithtown, New York 11787 ☐ Telephone 516/979-9800

COMMUNITY
HOSPITAL
OF WESTERN SUFFOLK
(FORMERLY SMITHTOWN GENERAL HOSPITAL)
AN AFFILIATE OF THE NEW YORK HOSPITAL — CORNELL MEDICAL CENTER

Glenn Hirsch
Administrator

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Herbert H. Humphrey Building
Room 309-G
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Dr. Roper:

We have reviewed the mortality information along with the rates for our hospital and would like to make the following recommendations:

1) A review of the information reveals that 43 of the 311 patients listed expired outside our institution. We do not track these patients and are not informed when these expirations occur. However, 2 of the 43 patients were transferred from our institution to another acute care facility. The fact that the cause of death may not be related to the admitting diagnosis would change listed rates of mortality significantly and must be acknowledged.

2) Community Hospital of Western Suffolk serves Smithtown and the surrounding community by admitting acutely ill patients from nursing homes and adult homes. Community Hospital of Western Suffolk is also the accepting acute care facility for Kings Park Psychiatric Center which has an approximate census of 2600 and Central Islip State Hospital with a yearly census of over 1200. Patients from these facilities for the most part have multiple chronic disease entities which require care and do not permit them to reside at home like other patients. This characteristic is not measured in your methodological choices. A review of the Health Care Financing Administration information reveals that 110 of the 311 patients listed have residence in nursing homes, adult homes, Central Islip and Kings Park Psychiatric Facilities.

3) Since Community Hospital of Western Suffolk does admit a high percentage of chronically ill patients with a number of complicating or comorbid conditions from nursing homes, adult homes and state psychiatric facilities the severity of illness on admission is higher than those from a home residence. This category of patients is also more likely to be admitted in terminal states when the adult homes, nursing homes and state psychiatric facilities are no longer capable of handling their care. Severity of illness on admission was not included in your methodology.

4) The majority of patients listed by the Health Care Financing Administration had multiple disease entities which contributed to the primary diagnosis. A review of our medical records reveals that the range of diagnosis listed were between 1-13. Since your method of collection only reviewed the first five diagnoses, many of the patients with chronic comorbidities that were listed from 6-13 did not receive the same measurements as their counterparts. Our records reveal 109 patients had chronic comorbidities between the 6th and 13th diagnoses. Reviewing the complete record would have lowered the mortality rate in each category for our institution.

5) Age was factored in only to the 85th year. A review of our sampling reveals 104 of the 311 patients were over the age of 85. Our medical records reveal that the number of patients from age 85-89 were 54; 90-94 were 40; 95-99 were 9 and 100 was 1. A review of the actuary tables reveals that expectation of life varies greatly from 85 with a 4.32 year expectation of life; 90 with a 3.06 year expectation of life; 95 with a 1.80 year expectation of life; 99 with a .50 year expectation of life. With this in mind Health Financing Administration should have factored in rates above 85 years which also would have lowered our mortality rates.

6) In reviewing our medical records we have found that of the 311 patients there were 49 severe chronic heart disease cases consisting of 5 patients who did not expire at this institution, 23 patients who were from adult homes, nursing homes and state psychiatric facilities and 24 of these patients had chronic comorbidities below the 5th diagnosis.

Of the 311 patients, 70 were pulmonary disease patients, 35 patients were admitted from nursing homes, adult homes and state psychiatric facilities. 30 patients had chronic comorbidities below the 5th diagnosis. Since these characteristics were not factored in they adversely increased our mortality rate.

7) Attached is schedule A which lists the inaccuracies contained in Health Care Financing Administration's "information" part.

As you acknowledged in your letter the information on its own is not a complete measure of the quality of care. Considering the foregoing information; the age of patients, comorbidities and the prior institutional residence of patients many of whom have chronic conditions, we believe that Health Care Financing Administration has overstated our mortality rates. I humbly suggest that a better indicator would be a comparison of severity of illness on admission and discharge data.

Sincerely,

Patricia Kelt RN BS

Patricia Kelt, R.N., B.S.
Director of Quality Assurance

PK/dh
Attachment

COMMUNITY HOSPITAL OF WESTERN SUFFOLK
Schedule A

PATIENTS WITH INACCURACIES

1) [redacted] Principal diagnosis is 4104. An inferior wall is not 4280.

2) [redacted] Transferred to Syosset Hospital.

3) [redacted] Transferred to St. John's Hospital.

4) [redacted] IPRO changed the principal diagnosis on 12/18/86 from 4280 to 42731.

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NEW YORK CITY HEALTH AND HOSPITALS CORPORATION
CONEY ISLAND HOSPITAL
2601 OCEAN PARKWAY ● BROOKLYN, NEW YORK 11235 ● 212-615-4000

Medicare Provider #330196 October 27, 1987

RESPONSE TO HCFA MORTALITY DATA

CONEY ISLAND HOSPITAL

Coney Island Hospital (CIH) serves a large geriatric population with a high proportion of poor immigrant patients. Over half of the Medicare patients treated are 75 years or older; 21% are over age 85. Over 40% of the Medicare patients are poor with Medicaid or no secondary pay source. 96% are admitted as emergency priorities, 20% are admitted more than once a year. The community served is high risk with age-adjusted mortality rates that are 240% higher for heart disease than the US, 200% higher for pneumonia and 50% higher for all causes.

CIH's major objection to HCFA's mortality study is that it is based on an incomplete and misleading profile of hospital cases. HCFA files contain 94% of the hospital's deaths but only 80% of the hospital's Medicare patients. Paid claims data supplied by Medicare's fiscal agent indicate an "actual" death rate 3 percentage points lower than the HCFA report and well within the predicted range of 13-20%.

	Cases	Deaths	Death Rate
HCFA Report	3154	673	21%
Medicare Paid Claims Data (excludes readmissions)	3960	719*	18%

*Includes deaths after discharge reported by HCFA.

This under-reporting of cases is even more critical in certain disease-specific categories. Using more complete information, CIH is within its predicted range for all categories and we request a correction of CIH's "actual" rates prior to publication of this information.

In addition, HCFA's prediction model is limited because it incorporates only billing information based on an unproven computer model. The model does not accounts for the patients' overall health condition, socioeconomic status, or severity and effect of multiple diseases. Another limitation is that the diagnostic groups for which HCFA predicted mortality rates contain disease conditions with a wide range of mortality risk and there is no adjustment for hospitals with higher than average proportions of high risk cases. Nor did HCFA's analysis include any review of the medical records of the patients involved to assess quality of care, cause of death or whether death was a probable outcome from the time of admission.

Nevertheless, CIH was within the predicted range in 12 of the 17 categories. Coney Island staff have begun to review the charts of the patients who died, to assure that quality care was provided. Overall findings to date include: 24% of the deaths represented patients over age 85, 24% died within 24 hours; over 99% were admitted as emergencies; 70% had 5 or more illnesses and 37% had a history of heart disease not captured on the bill because of space limitations (only 5 diagnoses can be reported on the bill). Comprehensive review was completed in three major categories, Gastrointestinal Disease, Cerebrovascular Disease and Sepsis.

GASTROINTESTINAL DISEASE (all 22 deaths reviewed)

This category mixes relatively low risk cases, such as uncomplicated ulcers, with very high risk cases, such as patients with perforated intestines or alcoholic cirrhosis of the liver. 9 of 22 deaths were in these 2 high risk categories. 3 of the 4 patients

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

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NEW YORK CITY HEALTH AND HOSPITALS CORPORATION
CONEY ISLAND HOSPITAL
2601 OCEAN PARKWAY ● BROOKLYN, NEW YORK 11235 ● 212-615-4000

Medicare Provider #330196 October 27, 1987

RESPONSE TO HCFA MORTALITY DATA (continued)

with perforated intestines died within 24 hours. All 5 of the cirrhosis cases had one or more of the major complications highly associated with mortality (such as hepatic coma or jaundice, and they averaged 10 or more secondary diagnoses. One case was a miscoded heart disease patient, and one patient had been transferred to a veterans hospital. The remaining 11 cases averaged 8 secondary diagnoses and half of them had chronic problems that HCFA considered significant but were not included on the bill because of space limitations.

CVA/STROKE (all 96 deaths reviewed)

The majority of cases were brought to the ER unconscious and many never regained consciousness. Most had either massive hemorrhages or major or multiple infarcts with limited chances for survival. 30% died within 2 days of admission and 13% were over 90 years old. On average, these 96 patients had 6 secondary diagnoses. 60% of the cases had significant chronic conditions not accounted for by HCFA because of space limitations on the bill. One case was transferred to another acute hospital (admission there was verified) and one patient signed out Against Medical Advice (AMA).

SEPSIS (all 40 cases reviewed)

These patients came to the hospital in critical condition. 23% came from nursing homes and 11% had nursing care in their home. 63% were at least 80 years old, 10% were over 90. 24% died within 48 hours. 40% also had pneumonia, 32% were in septic shock; 22% had cancer. Half were severely restricted in activity or totally incapacitated prior to admission. These patients averaged 7 secondary diagnoses. 59% had chronic illnesses not listed on the patient bill because of space constraints.

The Medicare patients included in this study died as a result of multiple and severe illnesses and because they were frail and in weakened condition. CIH will continue its review of the charts of in-hospital deaths as part of its quality of care monitoring system. We feel strongly that it would be a disservice to the staff and community served by CIH for HCFA to publish erroneously inflated mortality rates.

CORTLAND MEMORIAL HOSPITAL
134 Homer Avenue • P.O. Box 2010 • Cortland, New York 13045-0960
607-756-7525

October 27, 1987

Mr. Harvey Brooks
Health Standards and Quality Bureau
6300 Security Blvd.
Meadows East Building Room 2D2
Baltimore, MD 21207

Dear Mr. Brooks:

Following our review of patients included in the HCFA Mortality Study admitted to Cortland Memorial Hospital in 1986 with Cerebrovascular Accidents (CE), we request the following corrections be made in the HCFA statistics:

1) The HCFA data indicated our total CE admissions equalled 49 (please see attached summary). According to our records, we had 59 total CE admissions (see attached), where Cortland Memorial Hospital was their last admission known to us for 1986.

2) HCFA data indicated that our total CE deaths within 30 days of patient admission equalled 23. According to our records, we had 25 CE medicare deaths that met this criterion. Thus, we have identified two more deaths than HCFA data indicated.

3) Using the figures of 59 total cases and 25 deaths, our mortality rate becomes 42% which falls within our predicted mortality rate for CE.

To the best of our knowledge, we have pulled out all hospital admissions that do not fall into the study criteria: a. non-medicare patients and, b. patients who had subsequent admissions in 1986. We have included in our total cases all patients who died following a stay greater than 30 days.

Please find attached our list of 36 names that, when added to your list of 23 deaths, equals our 59 total CE admissions.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

CROUSE
IRVING
MEMORIAL
HOSPITAL
TOUCHING LIVES
FOR 100 YEARS
1887-1987

736 Irving Avenue, Syracuse, New York 13210 (315) 470-7111

Medicare Number 330203

October 27, 1987

William L. Roper, MD, Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

In our review of the HCFA data on mortality rates, it appears that there are relatively few errors in the information presented in the report. Our validation was by focused review of cases within several of the HCFA disease categories. During this validation process it was recognized that these statistics are based on the diagnosis that brought about the patient's admission to the hospital which was not necessarily the diagnosis that was the actual cause of the patient's death. In the majority of cases, the admission represented the terminal stage of the diagnosis, with death being an expected outcome at the time of admission given the patient's medical condition. We note that our mortality rate was well within the predicted range for our hospital.

The HCFA mortality rate includes only deaths of Medicare patients within 30 days of admission. This includes deaths for the elderly population which occurred in the hospital, or after discharge while under treatment at home, or while a patient in a nursing home. Besides not identifying the cause of death or information as to where the death occurred, it should be emphasized that the present methodology failed to measure the degree of the severity of each patient's illness within the diagnostic grouping. Because Crouse Irving Memorial Hospital is a tertiary care center receiving patients referred from 24 surrounding counties for treatment in specialty areas such as oncology and pulmonary disease, our patient population tends to experience a greater severity of illness for many of the disease entities. Severity of illness indices are only now being developed by the American Hospital Association, the Joint Commission on Accreditation of Healthcare Organizations and HCFA. When they are available they will be utilized to more accurately assess the quality of care in reference to the severity of illness.

At Crouse Irving Memorial Hospital all deaths are reviewed by the clinical departments in order to determine if there are any issues related to the quality of patient care. Mortality review is just one of our many on-going quality assurance activities which involve monitoring all aspects of care in order to identify opportunities to promote patient safety, better utilize hospital resources and ensure the best possible clinical outcomes.

Sincerely,

James W. Maher
President

JWM:BML

Doctors Hospital
170 East End Avenue
at 87th Street
New York, NY 10128
212.870.9000

A Not for Profit
Community Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

In response to your release of September 21, 1987, Doctors Hospital has reviewed the Medicare mortality data provided by the Health Care Financing Administration and we are submitting the following comments:

Although the Health Care Financing Administration has acknowledged that this information is not a complete measure of the quality of care at an individual hospital, it is difficult to imagine that these data would be useful for the individual consumer to make more informed decisions because:

1. The mortality analysis does not consider the type of acute care facility such as those approved to provide specialized services including cardiac surgery, trauma center designation, and the like, nor are institutions serving inner city populations whose mortality experience might be higher taken into account.

2. The methodology does not incorporate a severity of illness formula. For example, the Metabolic and Electrolytes Disorders Category includes diagnoses ranging from simple diabetes to hypoglycemic coma. Those facilities having great expertise in a particular mode of treatment will attract a disproportionate share of patients with potentially more severe stage of disease.

3. The report does not take into consideration the admission source such as emergency room, nursing home, or another acute care hospital. In a review of patients listed in the report we found that 95% came through our emergency room or directly from another facility. These patients would clearly be expected to be severely ill and have a high mortality.

To determine the accuracy of the data presented in the report, we have carefully reviewed every case.

Page 2
William L. Roper, M.D.
October 26, 1987

We chose to contact the primary physician for a random sample of patients identified as having died post-hospitalization. These physicians advised us, in all instances, that the patient's death was anticipated.

We have great difficulty viewing these data as an index of quality. Doctors Hospital has had in place for many years a quality assurance program which includes extensive physician peer review of all deaths. In fact, our hospital has some 34 committees and subcommittees which, on an ongoing basis, review a wide range of quality issues that encompass all aspects of patient care, not simply mortality. We believe that utilizing raw mortality data as a single indicator of the quality of care rendered by a hospital is extremely limited at best and does not reflect the outcome of services provided for all our patients.

We appreciate the opportunity to review the Health Care Financing Administration mortality data and trust that these comments will be given consideration in future reports.

Sincerely yours,

PA Kelly

Peter A. Kelly
Senior Vice President
Operations

PAK/ls

Edward John Noble Hospital
of Gouverneur, New York 13642

October 23, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

RE: Medicare Provider #330177
Mortality Rate

Dear Dr. Roper:

This relates to the preliminary mortality data which you have forwarded to us prior to its publication. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic and other data used in your analysis. For instance, the data supplied indicates 234 Medicare admissions occurred in 1986. Conversely, our records indicate that we had 438 Medicare admissions during the same time span. Presumably the discrepancy relates to multiple admissions of Medicare patients, but we have no way of verifying that precisely or for explaining the large variance in these numbers. While there appears to be agreement as to the number of Medicare recipients who died within 30 days of their last admission to the hospital, namely 30, there is a discrepancy between our number of patients who died while still an inpatient versus after discharge. Your figures suggest that 25 of these patients died while still hospitalized and 5 after discharge. Our records suggest 28 and 2 respectively. Of those two patients, one was transferred to another acute care hospital to receive treatment beyond the scope of this facility; the second, to a nursing home where she died. Furthermore, from our records it would appear that your process failed to identify three patients who were subsequently readmitted to the hospital following their initial discharge.

I think it is important to note that:

1. the average age of the 30 Medicare patients who died was 75.9 years.

2. Many of the deaths attributed to our hospital represent patients who were in the final stages of their particular disease often times with other complicating conditions which required several admissions during the year prior to their death.

3. due to the prevalence of the mining industry in this area there is a higher incident of pulmonary diseases and cancer than normally found in other parts of the country.

Of the deaths attributed to E.J. Noble Hospital, Gouverneur, all fell well within the expected mortality range for each category, and all fell into high risk diagnostic categories with the exception of 1 case. That diagnostic category, sepsis, carries with it a very high range of probability for death - 2% to 98%. E.J. Noble admitted one sepsis case who subsequently died making its mortality rate of 100%. The patient was 71 years of age, suffered from several comobidities including neoplasm, pneumonia and renal disease. The likelihood of death resulting from this admission was extremely high.

We would like to take this opportunity to acknowledge the concerted effort your agency took to present this sensitive information in a more objective manner than it did last year. Thank you for that effort. You have done everyone, including our industry and your agency a great service through your responsive reporting.

Very truly yours,

E.J. Noble Hospital

N. Donald Peifer
Interim Administrator

NDP:bp

CERTIFIED
#P402103577

ELIH
FOUNDED 1905 **Eastern Long Island Hospital**

201 MANOR PLACE, BOX H, GREENPORT, NEW YORK 11944-1298
516-477-1000

Medicare Provider # 33-0088

STATEMENT

The quality of health care provided at Eastern Long Island Hospital is of the utmost concern to the Hospital's Governing Board, Medical Staff and Administration. The Hospital monitors all mortalities through its hospital wide Quality Assurance Program. The Medical Staff conducts 100% mortality and morbidity reviews in search of potential deviations from nationally accepted standards of care. When quality issues are identified, corrective action is taken and followed up for resolution.

Eastern Long Island Hospital agrees that the principle of consumer access to valid and useful information on the quality of hospital care should not be challenged. However, use of the H.C.F.A. mortality rate model poses a serious technical question in that the ability of the model to detect differences in quality has not been evaluated. The model fails to address such critically important parameters as severity of illness, the effect of patient's and or family wishes as to the use of extraordinary life-prolonging measures, whether death was an expected outcome of the illness, and the presence or absence of all complications and comorbidities. These factors can be identified only through the individual case review process.

The data used by H.C.F.A. indicates that a total of 683 Medicare patients were admitted to Eastern Long Island Hospital in 1986, and that 81 patients died within 30 days of admission; 64 patients died while still a patient in the Hospital and 17 died after being discharged. Our own records indicate that 1,078 Medicare patients were admitted, and of those 81 mortalities reported by H.C.F.A., 67 patients died while in the Hospital and 14 patients died after discharge. (See attached revised patient listing) Perhaps the discrepancy reflects the fact that certain beneficiaries were hospitalized more than once during the year.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Elizabethtown Community Hospital
Elizabethtown, New York 12932

Judith Hathaway
Administrator

Medicare # 330252

Elizabethtown Community Hospital is a twenty-five bed hospital in a very rural area of upstate New York. We are essentially a medical facility and refer surgical cases to tertiary care facilities within a fifty mile radius.

According to this published record our actual mortality rate for the top 15 DRG's is low, with the exception of those cases in the diagnostic category of cancer. This record identified the last hospital admission of the year for all. Medicare beneficiaries in 1986 including those Medicare patients who died within 30 days of that admission.

Elizabethtown Community Hospital had 15 cases in the diagnostic category of cancer with an actual death rate of 80%. The average age of these patients was 73 years, they were hospitalized an average of 10.2 days and all were hospitalized at the time of death. But, we do not see these people as statistics, but as human beings, in many instances friends and neighbors, who need our support to die in comfort and dignity.

After being treated with surgery, radiation and/or chemotherapy in tertiary care facilites 50-60 miles away they are returned to their home communities. Sometimes these various treatment modalities have been prolonged for months and possibly years. During this time we have seen these patients through admissions for other conditions and for pain control. Ultimately we are here to support these patients and families through the difficult last days of their lives. Until science finds a cure for this disease it is anticipated our death rate for the many forms of this illness will remain consistant.

Serving Central Essex County Since 1926

RICHARD F. SPREER
Executive Vice President

ELLENVILLE COMMUNITY HOSPITAL
ELLENVILLE, NEW YORK 12428 914-647-6400

October 16, 1987

Health Care Financing Administration
Health Standrads and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Md. 21207

RE: Ellenville Community Hospital
Mortality Information
Provider # 330327

Dear Sirs:

After careful review of diagnostic category, Severe Chronic Heart Disease, we find that of the fifteen (15) cases listed two (2) were discharged home and one was transferred to another hospital for tertiary care. One patient had a long history of cardiomyopathy which was terminal.

The age range of the patients was 72-91, 7 of which were in the 80-91 age range. Patients of this age group have other chronic medical problems as well which are associated with age and contribute to heart disease and mortality. Patients in the 80 and over age group are significantly more likely to expire from severe chronic heart disease than those in the lower age groups.

Sincerely,

Richard F. Spreer
Executive Vice President

RFS:ajm

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

ELLIS HOSPITAL
1101 Nott Street, Schenectady, New York 12308 • 518 382-4124

22 October 1987

Medicare Provider No. 330153

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Mr. Roper:

Our initial positive reaction on the first reading of the results of the HCFA mortality study was changed to one of concern as we analyzed the report and considered the implications of the sweeping conclusions which the media and the public will draw from the data.

That Ellis Hospital is reported as well below the middle range of predicted mortality rates is positive, in so far as the criteria and their interpretation may be considered valid. We have grave concern about the validity and accuracy of the data and the blanket applicability of mortality as a measurement of the quality of care.

Our concern is not with the relative standing of Ellis Hospital but with the manner in which the data will be understood by those less technically sophisticated than your staff.

This response letter is not the forum for expression of our technical or statistical concerns but it is appropriate to report to you some of the other reasons for our response:

- The range of some of the predicted mortality rates is so broad as to be meaningless. One example: the range of predicted mortality for gynecologic disease is 0 to 84%. Such a vast range may be statistically valid but must be considered beyond the comprehension of the lay audience which will read the data in their local newspaper.

- A very basic question is not answered: Is mortality, universally, the best measure of quality? There are many instances where mortality is clearly not indicated as a measure of quality. A hospice patient is one example. A criterion for enrollment in a hospice program is the assumption that death will occur within a short period of time. The Ellis Hospital data indicate that 80% of the cancer patients who died after leaving the hospital were, in fact, hospice patients and death was the expected outcome.

  Mortality is merely one of several measures of quality. Unfortunately, the HCFA report will suggest to the public that death is the best criterion for measurement of the quality of health care services. This is misleading. Although you may issue a disclaimer when the report is released to the media, public presentations will ignore that disclaimer.

- Data are presented as specific to each institution, but inadequate consideration was given to the type of institution and to the severity of the illness of each patient. Ellis Hospital serves a wide area as a trauma center, offers extensive oncology services, provides hospice services and is committed to providing critical care services to an area far larger than our immediate service area. As a regional referral center we often receive critically ill patients from other area hospitals. This factor was not given sufficient weight.

  The severity of illness of the individual patient is a significant factor in the daily treatment plan of any patient and, by any standard, is of enormous significance in mortality, but severity is ignored in the HCFA report.

- Curiously, although the fact of a death is indicated, the actual cause of death is not specified and the cause of death could easily be a factor other than the diagnosis used for hospitalization and the condition for which the patient was treated.

- Significant related medical conditions cannot be listed and, therefore, are not considered in the analysis. As a result, HCFA's list of expected mortality would be artificially low. The absence of related medical conditions may be one of the shortcomings of the source document, the federal document UB-82. This is not a good source for this type of analysis because, among other reasons, the form has space to list only five diagnoses even though a patient could suffer from twice that number. And, the actual cause of death may differ from the diagnosis for which the patient is treated. This, too, is ignored in the HCFA report.

Our greatest concerns do not relate to the technical aspects of the government's analysis; the health economists and biostatisticians may argue the nuances for years to come. Our concerns are the reactions of the people whom you are attempting to serve with data, the consuming public.

The data interpreted in this report will be further interpreted and further simplified by the media. There must be serious doubt about the value of the data to the public after it has been further synthesized, summarized and reported in the media.

Your very proper disclaimer that the data should not be used to compare one hospital to another is factually correct but practically of little value. Such comparisons will be made in the media and, in fact, incorrect conclusions will be drawn and publicized widely.

While it is important for government to collect and disseminate national and regional data for the benefit of the consuming public, this attempt to establish the quality of care at individual institutions, using only mortality data, is a disservice to the public.

Sincerely,

William E. Schirmer

William E. Schirmer, FACHE
President

WES:sr

George H. McCoy
Chief Executive Officer

Western New York's LIFELINE

Edward J. Rutkowski
County Executive

ERIE COUNTY MEDICAL CENTER
462 Grider Street, Buffalo, New York 14215 / 716-898-3000

MORTALITY DATA COMMENTS

Brief:

The ECMC has reviewed the Mortality Data presented by the Health Care Financing Administration as it applies to specific disease categories. The Quality Assurance Division has focused its attention on the gastrointestinal disease diagnostic category, where the ECMC specific data was found to be an outlier.

Statement:

The Quality Assurance Program is likely to find the data useful. The exact extent is yet to be determined. Most importantly, the data is only a starting point for a valid comparative tool in assessing our position. The Quality Assurance staff has enhanced the data to further explain each case by reviewing each case and then applying a severity of illness screen to assign a predictability score for each death. We feel it is important to enhance the raw data for a number of reasons. The diagnostic category is determined by the principal diagnosis of the patient's last hospital admission and fails to take into account previous history. The circumstances of the admission often has many events which cannot be correlated to hospital or physician performance; i.e., emergency admission, condition on admission, admission from a long-term care facility, and current physician intervention. The level of care status and length of stay at the time of death may influence the referral of a case to the Quality Review but is not considered in the HCFA data. Lastly, when this data includes deaths within 30 days of discharge, no consideration is given to the level of care rendered subsequent to discharge, nor the condition or cause of death.

The Quality Review Program would like to make one additional comment regarding its hospital specific review. It is clear that the specific population not only had serious gastrointestinal disease but also many chronic, co-existing pathologies affecting other organ systems. The mortality rate can be attributed directly to our status as a tertiary care hospital dealing with more complicated patients. The socio-economic characteristics, as well as the source of patients (60% of hospital admissions are emergent), directly influence the level of care and physician involvement in each case. It can be directly inferred that the use of the Emergency Department as an entry to the system means that there may be a lack of care at the time of admission and that the patient is at a crisis point when seeking care. Individual case review will also identify terminal cases found in that data which will affect the pure statistical nature of the data.

Affiliated with the State University of New York at Buffalo

In specific terms, the ECMC case data presents the following patient characteristics. The GI diagnosis population of sixteen patients had both a median and mean age of 80 years. Seven patients were transferred to the ECMC from other health care facilities, of which four were from long-term care settings. Thirteen patients were admitted through the Emergency Room. Twelve of the sixteen patients had significant medical comorbidities which increased the risk of complication and the complexity of the medical management devoted to the case. Twelve cases were post-operative deaths. In these cases, surgical intervention was attempted to stop bleeding which did not respond to therapeutic procedures. Of specific note is that, in nine cases, the chronic medical conditions present prior to admission were the overriding contributory factor to the patients' deaths. The GI diagnosis was a secondary cause of death, although it was the reason for admission, principal diagnosis but not the primary diagnosis.

Each case noted in the above narrative has been referred to the Medical/Dental Staff Executive Committee through the Medical/Dental Staff Quality Assurance Program. Further evaluation is taking place to assure that any recommendations can be implemented to address this important issue.

Given the preceding discussion, it is not helpful for patients to evaluate a hospital purely on the statistical data offered in the HCFA survey. Inferences about hospital and physician quality cannot be made without the essentials of each case to enhance the overall data. The data presented should only be used to further enhance existing quality assurance efforts at the hospital and encourage further study.

The Frederick Ferris Thompson Hospital
A VOLUNTARY NON-PROFIT COMMUNITY ORGANIZATION
Canandaigua, New York 14424

MEDICARE #33-0074

HCFA DATA COMMENTS

All deaths are systematically reviewed and analyzed as an on-going part of the Quality Assurance Program at Thompson Hospital. The Hospital will use these HCFA data produced by its' statistical methodology to support the Hospital's quality assurance review, recognizing the limits of the data. Any additional perspectives that this analysis provides will be considered.

Some additional comments that provide more understanding of the 135 deaths assigned to F. F. Thompson Hospital are as follows:

22 - or 16% of the deaths occurred while not hospital inpatients.
5 - or 4% of the patients died within 24 hours of admission.
24 - or 18% died within 48 hours of admission.
54 - or 40% were 80 years of age or older.
34 - or 25% were 85 years of age or older.
12 - or 9% were 90 years of age or older.

The number of death occurring in the hospital would have been significantly reduced if there were an adequate supply of nursing home beds within the area. Noteworthy is the fact that 54, 40%, of the deaths occurred in those patients 80 years of age or older.

This is evidenced by these high age brackets as well as those who die within a relatively short period of admission.

10/26/87

Geneva General Hospital
Taylor-Brown Memorial Hospital

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

PROVIDER #: 330058

Dear Doctor Roper:

In our attempt to corroborate the analysis of the mortality data at Geneva General Hospital, we were unable to duplicate the figures provided. Our patient information is recorded on the basis of discharges, not admissions; however, this difference does not completely explain the discrepancies in the numbers found.

Your figures show 970 admissions for 1986; our data indicates 1,499 patients for the same time period. Your figures show 113 deaths; 18 of these dying outside of the hospital. Our data indicates 128 inhouse deaths; when including outside deaths, we totaled 146.

HCFA demonstrated an overall mortality rate of 12%; based on our figures, we found only a 9% overall mortality rate.

We are at a loss to explain these variances and have provided a detail of the variances in mortality rates by diagnostic category (Attached).

We recognize that mortality rates are not the only indicator for quality and concur with your statement that "the information on its own is not a complete measure of the quality of care at an individual hospital". We also concur that hospital mortality rate information is useful. In fact, we use mortality rates internally as an indicator of potential quality problem areas and review all deaths to determine the reason and to monitor our quality of care.

Very truly yours,

James J. Dooley
President & C.E.O.

JJD/mkz

196 North Street • Geneva, N.Y. 14456 • (315) 789-4222

GENEVA GENERAL HOSPITAL

Provider # [illegible]058

Diagnostic Classification	HCFA Mortality Rate	Correct Mortality Rate	HCFA Range of Predicted Mortality Rates
CA - Cancer	31%	22%	15 to 35%
CE - Cerebrovascular accidents	29%	25%	14 to 43%
EY - Ophthalmologic disease	0%	8%	0 to 90%
GC - Gastrointestinal catastrophes	27%	13%	4 to 51%
GI - Gastrointestinal disease	2%	3%	1 to 10%
GU - Urologic disease	2%	1%	1 to 19%
GY - Gynecologic disease	0%	0%	0 to 87%
HL - Low-risk heart disease	7%	10%	1 to 14%
HM - Severe chronic heart disease	25%	11%	15 to 37%
HS - Severe acute heart disease	35%	22%	26 to 54%
ME - Metabolic/electrolyte disturbances	11%	7%	5 to 44%
OP - Orthopedic disorders	0%	8%	0 to 8%
PN - Pulmonary disease	12%	8%	10 to 28%
RN - Renal disease	43%	23%	8 to 71%
SE - Sepsis	0%	0%	2 to 91%
TR - Severe trauma	11%	4%	3 to 22%

NEW YORK CITY HEALTH & HOSPITALS CORPORATION
HARLEM HOSPITAL CENTER
506 Lenox Avenue
New York, N.Y. 10037
212–491–8400

Charles E. Windsor
Executive Director

October 29, 1987

William S. Roper, M.D.
Administrator HFCA
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Attached is a revised copy of our two page narrative response to HCFA Medicare Mortality report on 1986 deaths. Kindly substitute these pages for the two already received. Thank you.

Sincerely yours,

Charles E. Windsor
Charles E. Windsor

CEW:gf
att.

FM.D4/85rlb

REVISED
Provider # 330240

HARLEM HOSPITAL

Harlem Hospital Center, a designated trauma and burn center, provides 211,000 days of inpatient care annually to an extremely high risk population. The poor health of the hospital's community is reflected in an age-adjusted mortality rate that is 130% higher than the US average. Among the diseases which are the leading causes of death for persons aged 65 and older (stroke, heart disease, pneumonia and influenza and diabetes), the death rates for the population in Harlem's primary service area are 100-400% higher than the national average. Few hospitals in the country treat as many poor, non-white, high-risk Medicare patients. Harlem Hospital welcomes the interest of the federal government in the high mortality rates and poor health status of the Harlem Community.

The accuracy of HCFA's model has not been tested and it may not accurately predict any particular hospital's deaths rate for several reasons. Limitations of the model include failure to adequately adjust for severity of illness, socioeconomic status, race, and the cumulative disabling effects of multiple acute and chronic health problems. These limitations are especially problematic for Harlem because of its atypical Medicare population. At least 86% of Harlem's Medicare patients were poor, 99% were black or non-white and 84% were admitted as emergencies. The poor overall health of these patients is demonstrated by the nature and number of secondary conditions/diseases. 58% had more than 5 diagnoses, 35% had chronic conditions that were noted but not put on the bill because space is available for only 5 diagnoses, and 38% had nutritional deficiencies. We also note that HCFA did not include 17% of Harlem's Medicare patients in the analysis.

Nevertheless, Harlem Hospital is within their range in 11 of the 17 categories examined. In at least 2 additional categories (Stroke and Severe Acute Heart Disease) Harlem is within the range when all Harlem's paid Medicare claims are included.

Our analysis indicates that of the 285 patients who died, 97% were admitted as emergencies, 86% arriving by ambulance. 85% had more than 5 diagnoses with 66% having chronic conditions that HCFA considered important but were not reported on the bill because of limited space. Over half had nutritional deficiencies.

Our review of 93 of 100 deaths in categories for which Harlem was over the predicted range focused on severity and complexity of illness. The debilitating effect of chronic conditions existing 3 - 6 months before admission was assessed using the APACHE I Chronic Health Evaluation form. This measure groups patients on the degree to which their illness/illnesses affects their ability to lead "normal" lives. Patients in the "severe" category include the bedridden, institutionalized, those unable to work because of illness, and those who require weekly physician visits. Patients with "serious" limitations include those whose illness limits their normal activity and those receiving hemodialysis.

SEVERE_ACUTE_HEART_DISEASE (21 of 23 cases reviewed) - Half the cases were severely limited in activity or incapacitated before admission. 2 were admitted from nursing homes. All were admitted as emergencies. 90% arrived by ambulance. Patients averaged 6 diagnoses, 21% with diabetes as a secondary condition. Despite resuscitative measure, 38% died within 24 hours. All but one patient lived in Harlem's primary service area, which has a heart disease mortality rate 123% higher than the national average.

STROKE (33 of 36 cases reviewed) - 40% were severely affected or incapacitated by their health problems prior to admission. The remaining 60% had some limitations of their daily activities. Patients averaged 9 secondary diagnoses. 30% had serious chronic conditions (e.g., heart disease, diabetes) that could not be included on the bill. 31 cases or 94% arrived by ambulance.

SEPSIS (9 of 9 cases reviewed) - All arrived by ambulance, one from a nursing home. 6 were severely limited or incapacitated by their condition before admission. Patients averaged 10 secondary diagnoses, including heart disease, kidney failure and gastrointestinal bleeding.

UROLOGIC_DISEASE (13 of 13 cases reviewed) - Although HCFA labels this a "low risk" category, all 13 patients were severely restricted or incapacitated before admission and averaged 12 secondary diagnoses. 85% arrived by ambulance; one from a nursing home.

GASTROINTESTINAL_DISEASE (13 of 13 cases reviewed) - In this "low risk" category, 70% of the patients were severely limited in activity or totally incapacitated before admission. Patients averaged 11 secondary diagnoses. 69% arrived by ambulance; 100% were emergency admissions.

LOW_RISK_HEART_DISEASE (13 of 15 cases reviewed) - Contrary to HCFA's label, these were very high risk cases that averages 9.8 secondary diagnoses including diabetes, alcoholism and paralysis. 80% arrived by ambulance and 62% had severe lifestyle restrictions before admission.

Our review shows that patients in these categories were admitted in serious compromised conditions with death a highly probable outcome. Harlem Hospital staff are committed to providing the highest quality of treatment with the best possible patient outcomes. We will continue to review a large sample of all medical records, including 100% review of all in-hospital deaths, to ensure that appropriate, quality medical care is provided.

NEW YORK CITY HEALTH & HOSPITALS CORPORATION
HARLEM HOSPITAL CENTER
506 Lenox Avenue
New York, N.Y. 10037
212-491-8400

Charles E. Windsor
Executive Director

Provider No. 33-0240

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Attached is a two-page narrative response to HCFA Medicare Mortality Report on 1986 deaths which is due for release this December. This two-page narrative response is what we are asking HCFA to include in their December release. We believe this response provides more insight on mortalities than does raw data alone. Although limited in scope by space and time constraints, nonetheless it does introduce several important issues germane to any mortality analysis which we hope HCFA will include in future releases.

Thank you for the opportunity to have our response included in this release.

Sincerely,

Charles E. Windsor

Charles E. Windsor

CEW:gf
att.

HARLEM HOSPITAL CENTER
PROVIDER NO. 330240
HEALTH CARE FINANCING A MINISTRATION DATA

	NAME	CORRECT AGE	HCFA AGE	DATE OF DEATH	HCFA DATE OF DEATH
[redacted]	[redacted]	72	83		
[redacted]	[redacted]	75	77		
[redacted]	[redacted]			12/19/86	12/17/86
[redacted]	[redacted]	76	83		
[redacted]	[redacted]	60	72		
[redacted]	[redacted]	68	70		
[redacted]	[redacted]	86	85		
[redacted]	[redacted]	85	84		
[redacted]	[redacted]	76	75		
[redacted]	[redacted]	82	81		
[redacted]	[redacted]	71	73		
[redacted]	[redacted]	91	93		
[redacted]	[redacted]	79	78		
[redacted]	[redacted]	92	90		
[redacted]	[redacted]	61	65		
[redacted]	[redacted]			12/17	12/31
[redacted]	[redacted]	77	76		
[redacted]	[redacted]	79	80		
[redacted]	[redacted]			10/25	10/28
[redacted]	[redacted]			12/17	12/31
[redacted]	[redacted]			1/22	1/31
[redacted]	[redacted]			12/6	12/31
[redacted]	[redacted]			11/12	11/19
[redacted]	[redacted]			8/22	8/25
[redacted]	[redacted]			6/4	6/10
[redacted]	[redacted]			3/28	3/29
[redacted]	[redacted]			2/20	2/21
[redacted]	[redacted]	78	107		
[redacted]	[redacted]			215	215
[redacted]	[redacted]	76	83	Sent to Neurological Institute	
[redacted]	[redacted]	73	74		
[redacted]	[redacted]	86	87		
[redacted]	[redacted]	67	69		
[redacted]	[redacted]	67	69		
[redacted]	[redacted]	65	72		

SAINT
FRANCIS
HOSPITAL

NORTH ROAD
POUGHKEEPSIE, NY 12601
914-471-2000

Executive Offices

Saint Francis Hospitals, Poughkeepsie and Beacon, New York
Medicare Provider Nos: 330067, 33T067, 33S067 (Poughkeepsie)
330186, 33V186 (Beacon)

RESPONSE TO HCFA MORTALITY DATA 1987

Overview

Saint Francis Hospital Poughkeepsie and Beacon, NY, both fall within the range of expected mortality in each of the 16 diagnostic categories analyzed by HCFA.

Consumers have a legitimate interest in obtaining valid, useful, reliable information on the quality of health care available to them. Mortality rates, however, by themselves, do not measure quality. This data is most effectively used to guide or focus the hospitals' quality assurance programs and peer review, which at present is the only method that is reliable for evaluating quality. Because mortality rates are easily misinterpreted, they can cause confusion and apprehension among Medicare beneficiaries and the public in general.

At issue concerning the HCFA data is the ability of the model to detect differences in quality, which has never been evaluated. The HCFA data assumes that each hospital's patients are "average" except with respect to the following few characteristics: principal diagnosis, the presence of certain selected complicating illnesses, sex and age, the number of times the patient was admitted to the hospital in the preceding 12 months, and whether the patient was transferred from another hospital. The model does not include measures of severity (how ill the patient was at time of admission), whether the patient was transferred from a nursing home, was being treated at home prior to admission, had a terminal illness, or information about the patient's psychological state or general health status. These factors would also influence the statistical rates. In addition, the HCFA data is not all inclusive. The mortality rates apply only to Medicare patients and differ from other indicators of inpatient mortality because they are calculated using only deaths that occurred within 30 days of the last admission of a Medicare beneficiary to a hospital in 1986.

Saint Francis Hospitals' Review of Data

The cases included in the report for Saint Francis Hospitals Poughkeepsie and Beacon were reviewed by the Medical Records Department. All cases were correctly identified as Saint Francis cases and the dates of discharge and death were validated. Approximately 15% of the cases listed expired outside of the hospital within 30 days of discharge.

Saint Francis Hospitals
Poughkeepsie and Beacon, New York

Mortality Review at Saint Francis Hospitals

All mortalities occurring in the hospital are subjected to intensive retrospective review as one part of our Quality Assurance Program. Cases are screened by medical record coders at the time of discharge (death) and immediately classified as anticipated or not anticipated based on criteria developed by the Medical Staff. Deaths not anticipated are reviewed immediately by the Quality Appraisal Steering Committee and the appropriate departments. Cases are further classified by severity of illness into: Class I - Death anticipated; Class II - Death not expected by due to factors beyond the control; Class III - Death not expected but accompanied by appropriate care to which the patient did not respond; Class IV - Death not anticipated.

All cases are reviewed according to the following scheme: Medical Records ---> Departmental QA Subcommittees (i.e. Medical, Surgical Mortality, etc.) ---> Medical Staff Departments ---> QA Screening Committee ---> Quality Assurance Committee ---> Medical Executive Committee ---> Joint Conference Committee ---> Board of Trustees.

The review includes items such as appropriateness of admission (to hospital and special care units), timeliness and adequacy of diagnostic assessment, management, use of invasive procedures, referrals, utilization of nursing and ancillaries, and discharge planning (including assessment of stability of condition on discharge).

After review, corrective action is implemented by the appropriate department. In other cases the data is collected and trended by physician for utilization in physician profiles at the time of reappointment.

We have instituted a computerized measurement of severity of illness in critical care through use of the APACHE II system. In January 1988 we will implement a computerized severity of illness system to evaluate all patients in the hospital. Mortality review then will become even more meaningful since it will consider severity of illness.

Mortality Review as Part of Overall Quality Assurance

Saint Francis Hospitals recognize that mortality review as described above represents only one small portion of the hospitals' Quality Assurance Program. Our comprehensive approach also includes: medical record review, tissue and transfusion review, surgical case review, medical and surgical morbidity review, drug utilization review, pharmacy and therapeutics review, generic screening for adverse patient outcomes (concurrent), utilization review, review of PRO quality issues, review of patient complaints, incident report review (New York State), internal incident report review and malpractice case review (through Risk Management), and extensive review of credentials and privileges for physicians and all health care providers. In addition, every department in the hospital utilizes a departmental QA plan to monitor the quality and appropriateness of patient care rendered. The data accumulated is then trended and included in specific physician profiles that are used to judge clinical competence.

Future Release of Data

The HCFA mortality data that will be released can serve as a prototype as more comprehensive data models are developed. The American Hospital Association and other organizations, including the Joint Commission, are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. We look forward to seeing the results of those efforts, since measuring quality is a complex and difficult task, and methods that will better serve the public are needed.

October 23, 1987
PR226

Michael J. Weidner, *President*

October 27, 1987

Medicare Provider No. 33-0164

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sir:

Thank you for forwarding data concerning mortality rates at Highland Hospital of Rochester. We appreciate the opportunity to review and comment on the data prior to its publication.

We have reviewed the data and confirm that the patients listed as having died did in fact die while an inpatient at Highland Hospital with additional confirmation of a number of patients who expired subsequent to discharge. We find that in none of the diagnostic categories does Highland's actual mortality rate fall outside of the HCFA range of the predicted mortality rate. Analysis, however, of all categories has been endorsed by the Quality Assurance/Risk Management Committee. We have performed initial reviews of the data and are currently performing additional more in depth scrutiny for quality assurance purposes. Particular attention is being given to an assessment of the degree to which our teaching hospital has a prevalence of patients with underlying diseases, complicating/comorbid conditions. Findings of those reviews are being forwarded through our Quality Assurance program.

Highland Hospital of Rochester has had a long standing history of committment to providing high quality health care in the Rochester community. Fundamental to that committment is the promotion of quality through a hospital wide quality assurance program. Our program encourages improvement through education, review activities and wide spread information dissemenation. Receipt of the HCFA mortality data provides yet another opportunity for Highland's Board of Directors, Administration, Medical Staff and hospital staff to review an additional quide in our quest for quality assessment. Additional measures of quality care are continually being assessed for inclusion in Highland's Quality Assurance program and the HCFA data is viewed here as complimenting that process.

HIGHLAND HOSPITAL OF ROCHESTER • 1000 SOUTH AVENUE • ROCHESTER, NEW YORK 14620 • (716) 473-2200
An Affiliate of the University of Rochester School of Medicine and Dentistry • VHA • *A Member of Voluntary Hospitals of America Inc* •

Highland Hospital of Rochester is a 272 bed voluntary, non-profit affiliate of the University of Rochester School of Medicine and Dentistry. It has active residency teaching programs in Family Medicine, Internal Medicine, Surgery and Obstetrics/Gynecology. As a teaching hospital with the pre-requisite equipment and specialty care expertise Highland tends to draw a severely ill patient mix. Highland receives numerous referrals to its Oncology, Pulmonary and Nephrology Departments.

Highland has developed a national reputation for being on the forefront of cancer treatment. Its innovative treatment techniques bring patients from all over the world. Many of the techniques developed and taught at Highland Hospital's Daisy Marquis Jones Oncology Center improve the care provided to cancer patients throughout the country. These include the use of the linear accelerator in intraoperative radiation procedures, hyperthermia and other state-of-the-art modalities in surgical oncology.

Highland also plays a significant role in meeting many of the Pulmonary and Nephrology needs in the Rochester community. Review of the HCFA data confirms that a significant number of patients enter Highland through our Emergency Department for acute Pulmonary disease. A significant number of these patients are admitted from Nursing Home facilities for ventilator care.

Highland's assessment of quality care includes a continuous composite of a wide range of indicators. Departmental review of morbidity and all mortalities is one such indicator. Deaths are reviewed as are items like infection rates, Cesarean Section rates, re-admission rates, appropriateness of consultations, drug utilization etc.. These reviews are being augmented by the HCFA predicted mortality rates and Highland's actual mortality rates. Beyond individual case review, the use of aggregate data, (looking for trends and patterns) is a key component in identifying potential problems and systematically taking steps to remedy noted deficiencies.

Additionally, Highland is working to implement Severity of illness scoring in order to further refine our Quality Assurance and practice pattern assessments. This scoring is recognized as an important aspect of reviewing quality and making supported judgements about levels of quality.

We plan to continue to review subsequent HCFA rates issued and to incorporate the data in our on-going program of quality reviews.

Thank you for your assistance in our efforts.

Sincerely,

Sharon L. Insero

Sharon L. Insero
Assistant Vice President
Quality Assurance

SLI:kam

NEW YORK SOCIETY FOR THE RELIEF OF THE RUPTURED AND CRIPPLED *maintaining*

THE HOSPITAL FOR SPECIAL SURGERY

535 EAST 70TH STREET, NEW YORK, N.Y. 10021
(212) 606-1236

Donald S. Broas, F.A.C.H.E.
Vice President and
Executive Director

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

We have reviewed the Health Care Financing Administration's selected mortality information for specific DRG categories for Medicare patients treated at The Hospital for Special Surgery in 1986. We provide the following information for purposes of clarification.

The total number of Medicare admissions in 1986 to our hospital was 1,594 versus the reported number of 1,092.

The dates of admission and discharge for patient [redacted] are incorrectly identified as 4/1/86 - 4/4/86. The corrected dates are 4/7/86 - 4/13/86.

Patient [redacted] died 18 days after discharge from our hospital. The individual was a cancer patient who received radiation treatments at another institution subsequent to discharge from The Hospital for Special Surgery. We have not pursued this case beyond the resources available within our own institution.

Finally, patient [redacted] was discharged from The Hospital for Special Surgery on 4/4/86 and admitted to another hospital the same date.

We anticipate that these corrections will be incorporated into the final report. If we can be of further assistance please do not hesitate to call.

Sincerely,

Donald S Broas

dsm

Huntington Hospital 270 PARK AVENUE, HUNTINGTON, NEW YORK 11743 • (516) 351-2000

A non-profit community hospital

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Enclosed is Huntington Hospital's (Provider #330045) response to the release from the Health Care Financing Administration of 1986 Mortality data. Also enclosed is a summary of errors which we identified in the patient specific data supplied by HCFA.

If you have any questions, please feel free to contact me at (516) 351-2205.

Sincerely,

Thomas M. Hoeft
Thomas M. Hoeft
Assistant Administrator

TMH:ml
Encl.

Huntington
Hospital 270 PARK AVENUE, HUNTINGTON, NEW YORK 11743 • (516) 351-2000

A non-profit community hospital

October 22, 1987

Provider #330045

COMMENTS REGARDING MORTALITY RELEASE

Huntington Hospital welcomes the opportunity to respond to the release of mortality data which is being published by the Health Care Financing Administration (HCFA). We share the concern that HCFA, a host of other organizations and especially the consumer has with reference to the quality of care provided in hospitals. Huntington Hospital has always been acutely aware of our obligation in this regard and almost ten years ago a formalized Quality Assurance Program was initiated. This program encompasses the activities of all hospital and medical staff departments and committees. The Board of Directors, the Medical Staff, and Administration are committed to providing a safe environment for patients, staff members, employees, volunteers and visitors. Through this integrated, comprehensive and effective Quality Assurance Program an optimal level of medical care and services within available resources can be delivered to patients in an atmosphere which minimizes the potential for injury or accidents within the hospital.

Through our Quality Assurance Program all activities within the hospital are monitored and evaluated with the intent of identifying patterns or trends which could point to the existence of a problem. There are dozens of issues which are reviewed on a regular basis in an attempt to identify and prevent potential problems before they become real problems. One of the components of this program has been the review of all hospital mortalities. During recent years this review process has become more formalized. Because of these efforts it came as no surprise that the hospital's actual mortality rate fell within the predicted ranges for mortality used by HCFA. To date, we have not identified any significant patterns or trends in this regard.

The release of these mortality data, however, has the potential for significant misinterpretation, misunderstanding and distortion. The comparisons of actual and predicted mortality rates can suggest to the hospital and its Medical Staff that a particular category merits special review but they cannot and should not be perceived as a valid indication of the quality of hospital care. Although this disclaimer is recognized by HCFA and we are hopeful that it will be made abundantly clear in the report and the release, we remain deeply concerned that the potential for incorrect interpretation is inherent in the release of these data.

The weaknesses in the model and the methodology used by HCFA need not be emphasized but it is important to understand that the patient characteristics included in the HCFA model only embraced age, sex, the number of prior hospitalizations within one year, whether the patient was transferred from another hospital and whether the patient has other complicating illnesses. It does not include the following patient specific characteristics:

general health status; patient's psychiatric condition, family support availability; number of physician consultations; admission status; the presence of a "do not resuscitate" order; whether the patient was transferred to another health care facility upon discharge; the number, types and risks of operations performed; and most importantly, the severity of the condition for which the patient was admitted. We feel that because these factors were not included in this model, it has seriously compromised the meaningfulness of the data presented.

The hospital's specific data utilized by HCFA has been verified with hospital documentation and only three corrections are necessary. In two instances in the pulmonary disease category the patient died in 1987 and in one instance in the same category we have been unable to locate an admission for the patient for 1986. With these minor corrections the adjusted mortality rate for this category decreases from twenty to nineteen percent.

The format of the information presented and provided by HCFA will allow us to further review the mortality data from a viewpoint that has not yet been available. This will supplement and add a new dimension to our mortality review process. Through this and all of our other quality assurance activities, we are confident that we have a system which will recognize and prevent potential problem areas before they become significant.

October 22, 1987

TO: Health Care Financing Administration
FROM: Huntington Hospital - ID #330045
SUBJECT: Corrections In 1986 Mortality Data

The highlighted information for the following patients listed on the original HCFA Mortality List represent changes that should be made in the indicated patient specific categories:

HIC #	SURNAME	DIAG. CAT.	LISTED ADM. DATE	LISTED DISCH. DATE	LISTED DATE OF DEATH	ACTUAL ADM. DATE	ACTUAL DISCH. DATE	ACTUAL DATE OF DEATH	EXPLANATION
[redacted]	[redacted]	CA	8/10/86	8/16/86	8/31/86	**8/27/86**	**8/31/86**	8/31/87	Pt. Readmitted and Died in Hospital
[redacted]	[redacted]	CA	6/2/86	6/7/86	6/10/86	**6/10/86**	**6/26/86**	**6/26/86**	Pt. Died in Hospital
[redacted]	[redacted]	CA	9/25/86	10/2/86	10/3/86	9/25/86	10/2/86	**10/2/86**	Pt. Died in Hospital
[redacted]	[redacted]	CA	11/9/86	11/25/86	11/27/86	11/9/86	11/25/86	**11/25/86**	Pt. Died in Hospital
[redacted]	[redacted]	HS	12/27/86	12/28/86	12/31/86	12/27/86	12/28/86	**12/28/86**	Pt. Died in Hospital
[redacted]	[redacted]	GC	12/30/85	1/10/86	1/27/86	**1/27/86**	**1/27/86**	1/27/86	Pt. Readmitted and Pt. Died in Hospital
[redacted]	[redacted]	PN	12/17/86	12/26/86	1/6/87	**1/6/87**	**1/18/87**	**1/18/87**	**Pt. Readmitted and Pt. Died in Hospital in 1987**
[redacted]	[redacted]	PN	12/18/86	12/28/86	1/3/87	-	-	-	**Pt. Died in 1987**
[redacted]	[redacted]	UN	12/28/85	1/17/86	1/19/86	12/28/85	1/17/86	**1/17/86**	Pt. Died in Hospital
[redacted]	[redacted]	UN	12/31/85	1/12/86	1/22/86	12/31/85	1/12/86	**1/12/86**	Pt. Died in Hospital
[redacted]	[redacted]	CE	7/20/86	8/5/86	8/6/86	7/20/86	8/5/86	**8/5/86**	Pt. Died in Hospital
[redacted]	[redacted]	GI	12/2/86	12/13/86	12/31/86	12/2/86	12/13/86	**12/13/86**	Pt. Died in Hospital
[redacted]	[redacted]	GU	12/4/86	12/8/86	12/29/86	**12/10/86**	**12/29/86**	12/29/86	Pt. Readmitted and Pt. Died in Hospital
[redacted]	[redacted]	PN	12/21/86	12/30/86	12/30/86	-	-	-	**Cannot Locate Records**

NY 125.3

Interfaith

Interfaith Medical Center
555 Prospect Place,
Brooklyn, N.Y. 11238
(212) 240-1000

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Re: Provider #330-397

Enclosed is our response to the Medicare mortality information which was received from your office last month. The response is in two sections. First, written comments which are designed for inclusion in the December publication of nationwide data. Second, a copy of the pages within the original case listings which contained inaccuracies in patient-specific information. The data of patient expiration, in particular, seemed to be a common problem.

If you have any questions about this information, please feel free to contact Barbara Stahura, Assistant Vice President for Quality Assurance at (718) 935-7073.

Very truly yours,

Nancy Dunham

Nancy Dunham
Vice President

cc: Theodore R. Jamison

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Interfaith

Interfaith Medical Center
555 Prospect Place,
Brooklyn, N.Y. 11238
(212) 240-1000

October 27, 1987

MEDICARE PROVIDER #330-397
RESPONSE TO MEDICARE MORTALITY ANALYSIS

The Health Care Financing Administration (HCFA) has completed and will publish in December a study which attempts to calculate "predicted" Medicare patient mortality rates which are then compared to hospitals' actual mortality rates. This paper is a response to the HCFA study.

Interfaith Medical Center is a 620 bed teaching hospital which provides a full range of inpatient, outpatient and emergency services to residents of Central Brooklyn. Interfaith treats many low income patients and many elderly patients who have had limited access to medical care throughout their life.

The present mortality analysis by the Health Care Financing Administration shows that the actual mortality rate for Medicare patients dying from all causes during 1986 was in the statistically expected range. The small group analysis also showed an actual mortality rate for 15 of the 16 subcategories which fell within the expected range. Only one group, Pulmonary Diseases, had a mortality percentage which did not fit within the predicted range.

The hospital's Quality Assurance staff have thoroughly studied the individual mortality cases in the pulmonary disease group. Several inaccuracies in the federal data were identified, including one patient who expired during stay at another hospital. Details of the pulmonary disease data errors have been provided to HCFA.

Our staff analysis found several very important characteristics about Interfaith's Pulmonary Disease patients which were not considered in the statistical analysis:

1. Severity of Medical Status
   Over half of the pulmonary disease patients were admitted to Interfaith directly from a nursing home. These patients' pre-existing illness and disability meant they were unable to care for themselves independently.

   Over two thirds of the patients had multiple co-existing medical conditions requiring care in addition to the principal pulmonary condition which caused their hospital admission. Examples of this were found to be drug addiction and infectious disease. The HCFA study model did not fully account for the effect of all of these multiple severe medical conditions on individual patient mortality.

Our study of the individual cases in the pulmonary group also noted that a majority of patients were admitted for treatment of pneumonia. Pneumonia is an illness which is very common in elderly, disabled and debilitated patients and is a frequent cause of death for nursing home patients. The study also did not take this into account.

2. Socioeconomic Status
   Over three fourths of the individual pulmonary mortality cases were patients with both Medicare and Medicaid coverage. Again, Interfaith's patient population is predominantly low income. Medical patients frequently qualify for Medicaid assistance due to high medical expenses not covered by Medicare. It is an accepted premise that patients of lower socio-economic status are sicker than patients in the general population suffering from similar illnesses. The study, again, did not take this into consideration.

To conclude, our detailed analysis of the cases within the pulmonary disease group identified several characteristics of Interfaith's patient population which were not properly measured by the federal statistical model. The actively documented medical care provided to the pulmonary patients was equal to the care provided to Medicare patients in the other 15 disease categories where the predicted statistical outcome range was achieved.

The Quality Assurance program at Interfaith Medical Center will continue to monitor the care provided to all patients and to ensure that every patient receives the best possible care.

THE JAMAICA HOSPITAL

89TH AVENUE AND VAN WYCK EXPRESSWAY · JAMAICA, NEW YORK 11418 718/657-1800

A VOLUNTARY NON PROFIT COMMUNITY HOSPITAL

jh
1891

OFFICE OF THE PRESIDENT

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Re: The Jamaica Hospital
I.D. No. 330014

Dear Sirs:

Pursuant to your request, enclosed is the response from this hospital to the HCFA mortality data. A review of the patient listing does not identify any inaccuracies regarding patient admission to this hospital.

If you need any further information, please do not hesitate to contact me at 718-657-1800, extension 1517.

Sincerely,

Kathleen a Frawley

Kathleen A. Frawley
Vice President and Counsel

KAF/cal
ENC.

THE JAMAICA HOSPITAL

89TH AVENUE AND VAN WYCK EXPRESSWAY · JAMAICA, NEW YORK 11418 718/657-1600

A VOLUNTARY NON PROFIT COMMUNITY HOSPITAL

jh
1891

DAVID P. ROSEN
PRESIDENT

Response to HCFA Mortality Data
Medicare Provider Number 330014

The Jamaica Hospital is committed to providing its community with outstanding patient care. The Jamaica Hospital is a 282 bed non-profit, fully accredited hospital and serves a population of over one-half million in Southeast Queens. The patient population is a varied one of mixed ethnic and disadvantaged socio-economic backgrounds. A 200 bed skilled nursing facility is located on the hospital campus. Because of the location of the hospital, at the confluence of three major expressways and between two major New York airports, and given the medically underserved nature of the area, there are over 40,000 patients treated in the Emergency Room and an additional 50,000 patients are provided care through the Ambulatory Care Programs.

The health problems experienced by the hospital's population are consistent with those expected among ethnic minorities and the socio-economically disadvantaged. It is well established that the hospital also serves a large and growing elderly population. The incidence of death due to heart disease, cancer, cirrhosis and cerebrovascular disease has been well documented over the years as being disproportionately higher in the communities the hospital serves. It is anticipated that elderly residents from the hospital's service area will continue to place increasing demands on the hospital. The hospital's catchment area has been designated under Section 332 of the Public Health Service Act as an area with a shortage of primary medical care manpower.

An analysis of the study of mortality rates at hospitals conducted by the U.S. Health Care Financing Administration indicates that the overall study has significant shortcomings. The statistical model used by HCFA to calculate "predicted" mortality rates was based entirely on an untested computer model. There was no actual review of medical records to determine if the deaths were the expected outcome given the patient's medical condition. The study does not account for such crucial factors as the severity of the patient's illness or the socio-economic characteristics of our population that are typically associated with poor health.

Despite the study's flaws, an analysis of the Jamaica Hospital's results indicates that the hospital is within or below the predicted range of mortalities in all of the 17 categories examined by HCFA. It is recognized, however, that the HCFA data is not an actual measure of hospital performance. The data is useful to assist the hospital in focusing its quality assurance activities. Under no circumstances should the data be used as the basis for judging the quality of care provided.

The Jamaica Hospital is committed to attaining the highest quality patient care. The hospital has an extensive hospital-wide quality assurance program designed to provide patients with the highest quality services. The hospital will continue its tradition of offering the finest medical care to its community.

The John T. Mather Memorial Hospital
Port Jefferson, Long Island, New York 11777

516-473-1320

ATTMORE ROBINSON, JR
Chairman of the Board
DAVID P SIPPERLY
Vice Chairman
EARLE F BETTS
Vice Chairman
VINCENT BOVE
Vice Chairman
WILLIAM W CRAWFORD
Secretary
KONRAD J KUHN
Treasurer
KENNETH D ROBERTS
President

October 23, 1987

Health Care Financing Administration
Department of Health & Human Services
P O Box 26676
Baltimore, Maryland 21201

Attn - HSQ-148-GNC.

Gentlemen:

Attached is Mather Hospital's response to the Mortality Data that will be released by HCFA.

It is our understanding that these figures will be included with the data to be published in the Federal Register.

Sincerely,

Kevin J Murray

Kevin J. Murray
Senior Vice President

mw
encl.

"Care When It Counts"

The John T. Mather Memorial Hospital

The Administration of John T. Mather Memorial Hospital feels strongly that the model used to predict a hospital's expected mortality is fundamentally flawed. The severe limitations of the model, and the data used to predict the expected death rates, include:

1. The statistical regression model does not account for the severity of illness.

2. Significant predictive data such as patient age was not verified by checking the medical record, only bills were used to gather this data.

3. Patients that died outside the hospital, up to a month after admission, were included in the hospital's mortality data.

4. The predictive model used to estimate the expected number of deaths has not been validated.

5. HCFA never made adjustments or refinements to the raw data to screen patients that requested "Do Not Resuscitate" orders.

6. Suffolk County has an extreme shortage of nursing home beds when compared to the nation. Consequently, there is a larger percentage of patients awaiting placement in a nursing home that die in the hospital.

Given these limitations, we agree with the administrator of the Department of Health and Human Services when he said, "We cannot, and do not, recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals." However, we know by past experiences that the newspaper articles written about this information strongly infer such a relationship. For that reason we firmly believe that this information should not be released without doing the complete detailed analysis necessary to make more definitive statements about predicted mortality.

KINGS COUNTY HOSPITAL CENTER

451 Clarkson Avenue
Brooklyn, New York 11203

Lorraine Tregde
Executive Director (Acting)

Telephone No.
(718) 735-3101

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Finance Administration
Department of Health Services
P.O. Box 26676
Baltimore, Maryland 21202

Dear Dr. Roper:

Enclosed is Kings County Hospital Center's response to the HCFA mortality data.

The attached comments on pages 1 and 2 are being submitted for publication and addresses the following:

- Hospital and Patient characteristics
- Limitation of the HCFA Model
- Data Quality, and
- Characteristics of deaths in categories in which the hospital exceeds the expected range

Additionally, I have listed below corrected information concerning dates of death reflected in the medical record.

I.D. NUMBER	CATEGORY	D/C DATE	CORRECTED DATE OF DEATH	HFCA DEATH DATE
[redacted]	HL	1/16/86	1/16/86	1/17/86
[redacted]	HS	12/21/86	12/21/86	12/22/86
[redacted]	PN	9/12/86	9/12/86	9/13/86
[redacted]	PN	11/29/86	11/29/86	11/28/86
[redacted]	RN	4/30/86	4/30/86	5/1/86
[redacted]	RN	12/21/86	12/21/86	12/31/86

Thank you very much for engendering the opportunity to respond to this important issue.

Sincerely,

Lorraine Tregde

Lorraine Tregde

New York City Health and Hospitals Corporation

NEW YORK CITY
HEALTH AND HOSPITALS CORPORATION
KINGS COUNTY HOSPITAL CENTER
451 CLARKSON AVENUE, BROOKLYN, N.Y. 11203

TELEPHONE: (718) 735-3101

Medicare Provider #330202

Kings County Hospital Center, one of the largest hospitals in the country, is a designated trauma center for Brooklyn. Specialty services include renal dialysis and burn units.

HCFA's study of Medicare mortality rates is based entirely on an untested computer model that uses only patient billing information and does not include a medical chart review to determine if deaths were attributed to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for KCHC's high risk patients. KCHC treats a poorer Medicare patient population evidenced by the fact that 87% of the Medicare patients have Medicaid, 74% are Black, 14% are readmitted annually (indicating chronicity) 42% have five (5) or more diagnoses, and 90% are admitted through the emergency room (indicating severity). The age-adjusted mortality rate of KCHC's primary service area is 84% higher than the national average.

DATA QUALITY

HCFA's files contain only 85% of KCHC's total Medicare patients. Nevertheless, KCHC is within the predicted range in 11 of 17 categories. Using more complete billing data, KCHC is within the predicted range for at least 13 of the 17 categories. We urgently request that more complete information be included before the study's publication. We are willing to supply paid claims files to support our counts.

OVERALL ANALYSIS

Ninety-nine (99%) percent of all deaths were admitted as emergency priorities. Seventy-five (75%) percent of the deaths occurred within 48 hours of admission; 47% within 24 hours. Seventy-two (72%) percent had five (5) or more secondary diagnoses with 4.4 the overall average. HCFA's model takes into account specific comorbid conditions only if they appear in 1 of 4 available spaces on the bill. Fifty-three (53%) percent of KCHC's deaths had at least one of those diagnoses reported as the 6th to 15th secondary diagnosis. HCFA's model fails to capture this critical information.

LOW RISK HEART DISEASE (19 of 19 deaths reviewed)

Fifty-eight (58%) percent of these cases died within 48 hours of admission; 47% died within 24 hours. All were admitted as emergency priorities and were severly limited in activity prior to admission. Fifty-five (55%) percent had five (5) or more diagnoses. Thirty-five (35%) percent had a previous history of heart disease; 58% had renal diseases and 82% had COPD.

SEVERE ACUTE HEART DISEASE (28 of 28 deaths reviewed)

All were admitted as emergency priorities and all were severely limited in activity prior to admission. Sixty-four (64%) died within 48 hours of admission; half within 24 hours. Sixty-six (66%) percent had five (5) or more secondary diagnoses with an average of 4.6 secondaries per case, including: hypertension, diabetes, vascular disease and COPD.

PULMONARY DISEASE (35 of 35 deaths reviewed)

All were admitted as emergency priorities and all were severely limited in activity prior to admission. Seventeen (17%) percent died within the first 48 hours of admission. Forty-three (43%) percent had five (5) or more secondary diagnoses with an average of 4.1 per patient. All had at least three (3) or more complicating diseases, not associated with their primary respiratory problem, such as: 80% chronic hypertension, 74% had diabetes, 92% had a metabolic disturbance and 87% had a history of cardiac disease. Almost half of those with a history of cardiac disease had suffered a heart attack. Forty-two (42%) percent of all cases were smokers.

RENAL DISEASE (12 of 12 deaths reviewed)

All were admitted as emergency priorities, severely limited in activity prior to admission and in end stage renal disease. Forty-two (42%) percent were transported by ambulance in a pending Hepatic coma condition. Seventeen (17%) percent of the deaths occurred within 48 hours of admission. Seventy-five (75%) had five (5) or more secondary diagnoses with an average of 6.2 per patient. Forty-two (42%) percent were IV drug abusers and non-compliant with their health care program.

SEPSIS (10 of 10 reported deaths reviewed)

All cases were admitted to KCHC as emergency priorities and were severely limited in activity prior to admission. Seventy (70%) percent had metastatic carcinoma. Another 20% of these cases were AIDS patients, on renal dialysis, who had been transferred from other hospitals. Eighty-three (83%) percent had five (5) or more secondary diagnoses with an average of 6.8 per patient.

Our comprehensive chart review of these patients indicated that these patients came to KCHC in very poor condition with death a highly probable outcome of their disease.

KCHC Hospital will continue its efforts to improve health outcomes for all its patients. Its ongoing review of medical records including 100% review of patient deaths, will remain part of our comprehensive quality assurance monitoring program.

KINGSBROOK JEWISH MEDICAL CENTER
585 Schenectady Avenue • Brooklyn, N.Y. 11203-1891 • (718) 604-5000

October 27, 1987

Mr. H. Brooks
Health Standards and Quality Bureau
6300 Security Blvd. Room 2D2
Meadows East Building
Baltimore, Maryland 21207

Dear Mr. Brooks:

Please find attached comments on mortality report to be published by the Health Care Financing Administration in December, 1987, on Medicare patients admitted to Kingsbrook Jewish Medical Center and who expired within thirty days of their last admission.

Also, please find itemized list of errors in data submitted by the Health Care Financing Administration. These errors are not all-inclusive.

Sincerely,

Martin Freiwirth,
Executive Director

pm
Attachment

Classified as a
Unique Specialty Teaching Hospital
by the New York State Office of Health Systems Management

KINGSBROOK JEWISH MEDICAL CENTER
585 Schenectady Avenue • Brooklyn, N.Y. 11203-1891 • (718) 604-5000

Executive Offices

October 27, 1987

Kingsbrook Jewish Medical Center has been designated by the Department of Health of the State of New York as a "Unique Specialty Teaching Hospital", one of only two in the State. This designation was made because Kingsbrook's patients' statistical illness patterns do not match those of other general hospitals in the State. This designation of uniqueness is a result of Kingsbrook's commitment for the past sixty (60) years to provide care to extremely ill patients, many of whom are transferred from affiliated nursing homes. Although Kingsbrook treats patients of all age groups and for the usual spectrum of diseases, it also has an unusually high number of very elderly patients with multiple co-existing severe disease processes.

Kingsbrook's mortality rates fall within the expected average in every category except pulmonary disease when compared to ordinary general hospitals. Our patients have significantly more associated illnesses than were considered by HCFA in estimating expected mortality rates. Kingsbrook Jewish Medical Center admitted three hundred and ninety-seven (397) patients in the high risk category of Pulmonary Diseases during 1986. Most of Kingsbrook's patients were seriously ill with other multiple illnesses which seriously debilitated them. Review of pulmonary disease deaths showed that half of the patients had more than four (4) comorbidities such as diabetes, renal disorder, strokes, terminal stage cancer, et cetera. In addition, eighty percent (80%) were over the age of eighty (80), fourteen percent (14%) were between the ages of ninety-five (95) and one hundred and three (103). Even though these seriously chronically ill elderly patients were admitted with a very poor prognosis for survival, no person was denied admission and every appropriate treatment modality was employed. Nevertheless, the mortality rate was only two percent (2%) over HCFA's expected range of deaths for pulmonary disease.

HCFA did not take into consideration the fact that eighty percent (80%) of those patients from affiliated nursing homes showed a higher than predicted mortality rate, as compared with the average medicare patient.

Errors made by HCFA were identified in our review of the data of the total number of deaths recorded as occurring after hospitalization, (reported 41, 19 of whom died in the hospital, 22 died on the outside.) Errors included incorrect social security numbers, inaccurate ages and dates of discharge. Possible errors of a more fundamental nature could have been made by HCFA since they were not verifiable because they did not fully reveal the methodology used in computing predicted mortality rates.

Classified as a
Unique Specialty Teaching Hospital
by the New York State Office of Health Systems Management

The care of each Kingsbrook patient is reviewed on a daily basis according to strict criteria. The results of these reviews, and indeed the HCFA statistics demonstrate that the care of Kingsbrook's patients is of the highest quality. To insure that this quality remains high, continuing educational programs are maintained for all staff. This has the full support and direction of Kingsbrook's Board of Trustees, Administration and the Medical Staff.

KINGSBROOK JEWISH MEDICAL CENTER

ERRORS FOUND IN STATISTICAL MODEL IN ALL CATEGORIES

HCFA	HOSPITAL
SS# [redacted] admitted:9/13 expired :9/14	admitted: 9/13 expired : 9/30
SS# [redacted] Age :89	SS# [redacted] Age :85
SS# [redacted] Age :90	Age :91
SS# [redacted] Age :84	Age :85
SS# [redacted] expired: 6/28	Expired: 6/26
SS# [redacted] Age :84	Age: 86
SS# [redacted] expired: 6/13	Expired: 6/11
SS# [redacted] Age :91	Age :84
SS# [redacted] Age :83	Age :82
SS# [redacted] Age :97	Age :98
SS# [redacted] Age :72	Age :78
SS# [redacted] Age :83	Age :85
SS# [redacted] expired : 11/26	Expired : 11/5
SS# [redacted] Age :89	Age :87

KINGSBROOK JEWISH MEDICAL CENTER

INTERPRETATIVE REMARKS

Total Medicare patients in the 16 categories.. 2,246
Total Medicare Mortality Rate in the 16 categories.. 427

ANALYSIS OF REPORTING ERRORS

Diagnostic Category	Deaths Reported by HCFA In-hospital	Deaths Reported by HCFA Post-hospital	Deaths Verified by Hospital In-hospital	Deaths Verified by Hospital Post-hospital
CA -- Cancer	41	7	45	3
CE -- Cerebrovascular Accidents	12	0	12	0
GC -- Gastrointestinal Catastrophes	18	5	19	4
GI -- Gastrointestinal Disease	13	1	14	0
GU -- Urologic Disease	14	4	16	2
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	9	2	9	2
HM -- Severe Chronic Heart Disease	24	3	25	2
HS -- Severe Acute Heart Disease	20	3	22	1
ME -- Metabolic/Electrolyte Disturbances	18	1	18	1
OP -- Orthopedic Disorders	1	0	1	0
PN -- Pulmonary Disease	127	11	132	6
RN -- Renal Disease	5	3	7	1
SE -- Sepsis	10	1	11	0
TR -- Severe Trauma				
EY -- Ophthalmalogic Disease	1	0	1	0
Total -- All Categories	313	41	332	22*

NOTES: In the Deaths reported by HCFA, the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths also exclude patients that the hospital does not believe were ever admitted to the hospital.

HCFA Total number of post-hospital expirations.. 41
HOSPITAL Total number of post-hospital expirations.................................... 22

*Because of limited time it was impossible to verify the time of death of these patients or whether those patients were deceased.

LAKE SHORE HOSPITAL, INC.
845 ROUTES 5 & 20 IRVING, N. Y. 14081-9716
TELEPHONE 934-2654 (CODE 716)

October 21, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
POB 26684
Baltimore, MD 21207

RE: Medicare Provider #00330293

Dear Dr. Roper:

We wish to have the following statement included with the HCFA release of our hospital's Medicare mortality statistics.

> *Lake Shore Hospital is a small 39-bed hospital with a contiguous 120-bed nursing home. Often, patients from its nursing home are transferred to the adjacent hospital where last minute life sustaining measurers are rendered in hopes of prolonging life. This influx of patients could inflate the hospital's mortality rate when you compare our rate to a similar size hospital that does not have such a facility.*
>
> *Rather than use the deaths that occurred just in the hospital to represent the hospital's actual death rate, the HCFA statistical model identifys deaths that occur within 30 days of admission to the hospital. This means that deaths that occurred outside of the hospital are included in the hospital's mortality statistics. This results in the attribution to the hospital of deaths that are unrelated to the condition of the patient that was under treatment at the time of discharge from the hospital. In our opinion, this is misleading and confusing to the public.*
>
> *In addition, the number of Medicare cases used to figure the hospital's mortality rate, is less than what the hospital actually treated in 1986. The number used by HCFA is 442, when in actuality our hospital treated 751 Medicare patients. Because HCFA did not use all of the Medicare*

inpatients treated in our hospital, the mortality rate computation is skewed and misleading. This contention is supported by a statement made by HCFA which says, "a second important consideration in reviewing and applying such statistics is the number of individuals admitted to each hospital. The smaller the number of admissions, the less reliable are the statistics, as the impact of random variations of outcomes in individual cases is greater". Since Lake Shore Hospital is a small rural hospital with a small number of admission, the statistical model fails to present an accurate picture of our mortality rate. HCFA also states that "not all the factors affecting the probability of death in a particular case, most notibly severity of illness, are included in the predictive model because information on them is not readily available. Thus a difference between a hospital's actual and expected mortality rates can not be definitively construed as reflecting especially high or low quality care."

On a more optimistic note, we believe the HCFA data will be helpful to our Medical Staff as they continue to identify areas needing further medical review. Our medical staff continues to maintain high quality patient care and welcomes any verifiable data that will assist them in their medical staff work.

We thank you for allowing us to submit our "side of the story".

Sincerely,

James B Foster

James B. Foster, FACHE
Administrator

pc: Salvatore Crino, President
    Oscar Llugany, MD, Medical Staff President

kb

LAWRENCE HOSPITAL

55 Palmer Avenue, Bronxville, New York 10708-3491
TELEPHONE (914) 337-7300

COMMENTS ON HCFA MORTALITY DATA
FROM LAWRENCE HOSPITAL
BRONXVILLE, NEW YORK

While Lawrence Hospital's 1986 mortality data fell within predicted ranges for all the categories which were analyzed, we would like to comment, not on our specific data, but on the study as a whole.

There are, we assume, many constructive purposes to which this study can be put. However, in our estimation one function this data cannot perform is that of a barometer of quality of care within an institution. To use this study as a measurement of an institution's ability to deliver quality health care on a day-to-day basis, whether its data ranks favorably or otherwise, is to run the risk of seriously misleading the health care consumer. The model's ability to predict the presence or absence of quality has not been tested, let alone validated.

Even though we are assured that many factors have been included in the analysis to unskew the results, one cannot realistically expect to cover all of them. In this generation of the model, for instance, there appears to be no severity of illness adjustment. One could expect that there are other unmeasured characteristics which could alter the results considerably.

To the best of anyone's knowledge, no one has yet to be able to accurately "quantify quality". Especially when we are addressing the issue of delivering quality health care, which is an ongoing, living process, it seems especially ill-suited to use mortality alone as a measure.

Roger G Dvorak

Roger G. Dvorak
President,
Lawrence Hospital
Bronxville,New York

NYCHHC

LINCOLN MEDICAL & MENTAL HEALTH CENTER

234 East 149th Street, Bronx, New York 10451
(212) 579-5000

October 26, 1987

William L. Roper, M.D.
Administration
Department of Health and Human Services
Health Care Financial Administration
Washington, D.C. 20201

Dear Dr. Roper:

Lincoln Hospital, a level one trauma and heart center is proud of its reputation for providing quality patient care services to the South Bronx Community. The only hospital in one of the country's poorest urban communities, Lincoln admits 31,000 patients per year. Despite numerous preventive and maintenance programs for this high-risk community, 90% of admissions come through the emergency room (ER), which provides critical care to patients with multiple diseases.

The (HCFA) study of Medicare mortality rates is based on billing data submitted by hospitals throughout the U.S. used in an unproven computer model. HCFA did not review medical records to determine cause of death or whether deaths were attributable to errors in medical care. Preliminary analysis suggests that the overall study has significant shortcomings. It omits many factors associated with increased risk of death including health status, disease severity, socioeconomic status and race; omissions significant for hospitals like Lincoln that serve a high risk population. 92% of Lincoln's Medicare patients are Hispanic or Black; 95% of them are poor; and 22% are admitted more than once every year.

DATA QUALITY

A comparison of paid claims files provided by Medicare's fiscal agent with the information provided by HCFA indicates that HCFA's files contain 88% of Lincoln's deaths but only 83% of Lincoln's total patients. This disproportionate under-reporting of live patients inflates HCFA's "actual" death rates. The paid claims figures (for 1986 cases billed through June 30, 1987) indicate an "actual" death rate 1 percentage point lower than the HCFA report.

	Cases	Deaths	Death Rates
HCFA Report	1167	202	17%
Medicare Paid Claims Data	1412	229*	16%

*Includes deaths after discharge reported by HCFA.

We urgently request that HCFA recalculate "actual" death rates before the study's publication and we can supply paid claims files to support our counts. (The attachment outlines other data errors in HCFA's report.)

An even greater degree of under-reporting of live cases by HCFA's inflates Lincoln's mortality rates in the only diagnostic category in which the "actual" rate appears to be over the HCFA predicted range. Using more complete billing data, Lincoln is within the "predicted" range in every category including Severe Acute Heart Disease.

Nevertheless, we reviewed all 56 severe acute heart disease deaths reported by HCFA. On average, patients had 3 or more secondary diagnoses including history of past heart attacks (2-3), diabetes, renal failure, chronic obstructive pulmonary disease, and hypertension. One-third of the deaths involved patients over age 80. 35 patients (62%) were brought to Lincoln's ER after suffering massive heart attacks. Despite resuscitative measures, these patients died within 24 hours of admission. Our review indicates that patient deaths in this category were the result of the nature and severity of the patient's condition.

Lincoln Hospital will continue its efforts to improve health outcomes for the South Bronx Community. We will continue our ongoing review of patient medical records, including 100% review of mortalities, as part of our comprehensive quality assurance monitoring program.

Sincerely,

Angel L Quinones

Angel Quinones
Executive Director

Hospital I.D. Number: 33-0080

ATTACHMENT

CORRECTED DATE OF DEATH

ID #	NAME	Date Admit	Date Dischg.	Date of Death
[redacted]	[redacted]	12-26-86	12-28-86	12-28-86
[redacted]	[redacted]	10-30-86	11-6-86	11-6-86
[redacted]	[redacted]	1-24-86	1-24-86	1-24-86
[redacted]	[redacted]	8-4-86	8-8-86	8-8-86
[redacted]	[redacted]	12-12-86	12-15-86	12-15-86
[redacted]	[redacted]	1-8-87	1-9-87	1-9-87
[redacted]	[redacted]	12-27-85	1-21-86	1-21-86

LITTLE FALLS HOSPITAL

140 BURWELL STREET • LITTLE FALLS, N. Y. 13365 • TELEPHONE (315)823-1000

DAVID S. ARMSTRONG, JR.
ADMINISTRATOR

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Medicare Provider: 330148

Dear Sir or Madam:

The following response is to the Mortality Data Release relevant to Little Falls Hospital. Thank you for the opportunity to share our comments.

Medical Record Review HCFA Identified Mortalities

In its statistical study of mortalities which occurred in this facility (within 30 days of admission) in 1986, HCFA identified 65 "cases" in the diagnostic category of carcinoma. Of the total identified admissions in the diagnostic category (65), 30 mortalities were identified, resulting in a mortality rate of 48%. The number of carcinoma mortalities was confirmed with in-house data collected by the Medical Records Department. The average age of the patients was 74.5 years. The youngest patient was 60 and oldest 92 years.

All 30 medical records of those patients who expired with the general daignosis of carcinoma were reviewed since this was the (only) area where the facility's mortality rate was above the HCFA calculated "predicted range" of 19 to 43%. Results of this review are as follows:

1. Diagnosis of carcinoma established prior to this admission:

   26 of 30 patients in this category. In one additional case, metastatic disease was suspected prior to admission, but the patient refused investigations which might have confirmed this. At the time of admission, clinical findings indicated metastatic ca of the liver, primary site undetermined.

2. Documentation in record of previous treatment (surgical, chemotherapy, radiation):

   Found in records of 23 of 30 patients.

3. Documentation in record that patient was admitted for (a) treatment of symptoms associated with disease process/treatment process and (b) if ultimately ineffective, for terminal or supportive care:

   Found in the records of 27 of 30 patients.

4. Diagnosis established during admission through investigation/ultimately expired during same admission:

   Found in 2 of 30 patients. In one case, attempts to establish a diagnosis occurred over a period of 11 months and involved several consultations with specialists. In the other case, definitive diagnosis was made after extensive testing and was discovered approximately mid-way through the patient's stay of nearly a month.

5. Patients not admitted from home (family living situation) to this facility:

   Four (4) of 30 patients; 1 nursing home patient; 3 transfers from another acute care facility transferred back for terminal care. It should be noted that the Hospice Program for Herkimer County was not available to provide direct patient care at home until January 1987.

The Hospital's quality assurance programs involve the review of every medical record of patient death. The medical staff review indicates that each death reported was due to progressive carcinoma and that the outcome could not have been altered in other medical facilities.

Sincerely,
David S Armstrong Jr.
David S. Armstrong, Jr.
Administrator

DSA/pwf

LONG BEACH MEMORIAL HOSPITAL
P.O. BOX 300
LONG BEACH, NEW YORK 11561
(516) 432-8000

October 26 1987

Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: LONG BEACH MEMORIAL HOSPITAL PROVIDER #330225

Gentlemen:

As requested, enclosed are Long Beach Memorial Hospital's comments on the mortality information submitted to the Hospital on September 21, 1987.

We trust that, in consideration of the brevity of the comments, they will be published verbatim. Should you wish to edit the comments, or should you have any questions regarding the comments, please do not hesitate to call me at the above number.

Very truly yours,

Martin F. Nester, Jr.
Administrator

MFN/lmm
Enclosure

LONG BEACH MEMORIAL HOSPITAL
P.O. BOX 300
LONG BEACH, NEW YORK 11561
(516) 432-8000

October 26, 1987

Medicare Provider #330225

COMMENTS ON HCFA MORTALITY INFORMATION

While, Long Beach Memorial Hospital notes that its actual mortality rates, in all categories, fall within the HCFA predicated mortality rates, we would like to take this opportunity to urge the public to use the HCFA Mortality Statistics cautiously, so as not, to draw improper conclusions on the quality of care rendered by a hospital.

The HCFA predicated mortality rates are developed by utilizing the average mortality rates of all Medicare patients who died in the country in 1986. Although, the predicated rate is adjusted for such things as; diagnosis, age and sex of patient and certain selected complicating illnesses, it does not take into account the unique characterists of a hospital's patient profile. For example, the HCFA data does not take into account patients admitted with multiple complications or patients who are deemed terminal at the time of admission.

For example, if we review the category of cerebrovascular accidents as reported for Long Beach Memorial Hospital, we find that the actual mortality rate is 34%, as compared to a predicated mortality rate of between 19% and 39%. However, in reviewing the actual records of the patients in this category, we noted the following facts: The average age of the patient was 84 years, 82% of the patients were admitted on an emergency basis through the Emergency Room, and, in 55% of the cases, the patient or family requested, on admission, that the Hospital make no effort to resuscitate in the event the patient's circulation or breathing fails. Clearly, this does not reflect the average patient admitted to a hospital in the category of cerebrovascular accidents.

It is equally important to have an understanding of the types of patients treated by a particular hospital. For example, some hospitals may treat only cancer patients in their final stages of disease while other hospitals may treat a predominance of trauma patients. Long Beach Memorial Hospital treats a large number of elderly patients which is reflective of the community it serves. The City of Long Beach has the highest concentration of eldery of any community in Nassau County. This is reflected in the number of nursing homes in the community. As of July 1987, there was a ratio of 12.5 nursing home beds per 1,000 population in the Long Beach Community, compared to a ratio of 4.1 beds per 1,000 population in the remainder of Nassau County. It is, therefore, reasonable to expect that Long Beach Memorial Hospital is admitting nursing home patients at a rate 3 times greater than the average in Nassau County and, consequently, would tend to care for a greater percentage of patients with multiple complicating conditions and shorter life expectancies than the population as a whole.

How then can hospitals and the public use mortality rates to make judgements with respect to the quality of care? The answer is that hospitals, such as Long Beach Memorial, review mortality information to determine whether patients are treated with optimal care and whether there are any opportunities to improve care. Mortality review, however, is only one part of Long Beach Memorial's overall quality review program. A variety of physician directed committees review many aspects of quality including; surgical case review, blood utilization review, infection control review, etc. to ensure that each patient is treated with the best possible care in the most appropriate manner. In fact, every record of every patient is reviewed by nurses and physicians to identify issues which may be contrary to expected treatment practices and to institute corrective action to raise the level of care.

Having mortality information, the public will now begin to think more about the quality of health care. However, mortality rates alone do not indicate the quality of care of any particular hospital, but may raise questions in the minds of the public which need to be answered. Accordingly, people who have particular concerns or questions of the HCFA information, are urged to contact the Long Beach Memorial Hospital to seek answers to those questions. Only in this manner, will the community develop complete confidence in their community hospital.

Manhattan Eye, Ear & Throat Hospital

210 East Sixty-fourth Street, New York, N.Y. 10021 • 212-838-9200

October 20, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hopsital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir/Madam:

We have received your communication, dated September 21, 1987, regarding mortality rates for Manhattan Eye, Ear and Throat Hospital and find no errors in the data.

Since our mortality rate is zero, we have no comments to offer.

Sincerely,

George A. Sarkar, Ph.D.
Executive Director

GS:pas

"The Regional Center For Specialty Care"

INCORPORATED 1869

Memorial Hospital & Nursing Home
of
Greene County

159 Jefferson Heights
Catskill, New York 12414
Tel. (518) 943-2000

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen/Mesdames:

Enclosed please find the Comments on HCFA Mortality Data of Greene County Memorial Hospital, Catskill, New York (Hospital 330052). We would appreciate it if our comments could be published along with the Hospital's Mortality Data in December 1987.

If you need any additional data, please contact my office.

Sincerely,

Rudolph J Quirini, Jr.

Rudolph J. Quirini, Jr.
Senior Vice President for Operations

rmg

Enclosure

Hospital - 330052

Memorial Hospital of Greene County
Comments on HCFA Mortality Data

Data Verification

The data used by HCFA indicates that a total of 767 Medicare patients were admitted to Greene Memorial Hospital in 1986 and that 113 of these patients died within 30 days of admission. Of the total deaths, 102 died while still a patient of the hospital, while 11 died after discharge. Our own records indicate that 1,321 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries. It is impossible to determine the percentage of the 11 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In *all* of the diagnostic categories, the hospital's actual mortality rate falls within or *below* the range of predicted mortality rates.

However, in the following diagnostic groups, Greene Memorial Hospital's actual mortality rate falls toward the upper end of the predicted ranges - severe chronic heart disease, pulmonary disease and sepsis, which basically reflect the County's higher mortality rates compared to Statewide averages for these groups. In the following diagnostic categories Greene Memorial's mortality rates fall below or at the lower end of the predicted ranges - cerebral vascular accidents, gastrointestinal catastrophies and severe trauma.

The rural nature of the Hospital's service area might account for a possible delay in seeking care by patients with certain chronic diseases, such as those listed above, which may partially explain the Hospital's mortality rates at higher than average (although well within predicted) levels. On the other hand, the Hospital enjoys very low mortality rates in the more emergent, episodic disease categories.

mercy hospital

1000 North Village Avenue / Rockville Centre / New York 11570 / 516-255-2201

Richard C. Herrmann, F.A.C.H.E.
Executive Vice President
& Chief Executive Officer

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Medicare Provider No. 330259

Dear Dr. Roper,

The measuring of quality is a laudable objective, however, mortality data alone is not a measurement of quality of care. Mortality information is useful in the quality assurance process to the extent that it may highlight cases or areas for further study. Actual case review is the only way to determine the quality of care provided.

Mercy Hospital maintains a vigorous utilization review and quality assurance program of all pertinent hospital services. This is provided in an effort to maximize the quality of patient care in a cost effective manner and to assist in the provision of good medical practice. as prescribed by the Joint Commission on Accreditation of Healthcare Organizations and the New York State Department of Health. These goals are achieved by a system of monitoring written reports documenting the activities of the various clinical and nursing services and other hospital departments. as indicated.

The recent HCFA analysis is a considerable improvement over earlier studies, however, its usefulness is limited. The HCFA analysis relates six specific patient characteristics to mortality but fails to incorporate numerous, potentially influential variables. Examples of such variables include unique hospital services such as cancer care units and active emergency rooms, the type of hospital, the type of admission (emergent or elective), the patient's economic status, the patient's prior health status, and others. The HCFA model highlights areas for further review, but at best is an incomplete and potentially misleading indication of quality of care.

Sincerely.

Richard C. Herrmann
Executive Vice President

BSS:lcw

A Voluntary, Not-For-Profit Hospital founded in 1913 by the Sisters of the Infant Jesus.

METROPOLITAN HOSPITAL CENTER

Metropolitan Health Plan
1901 First Avenue/97th Street
New York, NY 10029
212/230-6501

Office of the Executive Director

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

This letter is in response to the Medicare Mortality Data which is being released by HCFA. The attachments represent:

- A two-page explanation which is the only document which should appear in your publication. (Attachment A)
- The other attachment which is for your information only identifies the errors from the Mortality List which was submitted by HCFA. (Attachment B)

You will observe that of the 19 deaths which were reported by HCFA for Metropolitan Hospital whereby the Date of Discharge did not match the Date of Death, the following are the facts:

- In 11 of these cases, the patient did expire at Metropolitan Hospital on the Date of Discharge reported by HCFA. On none of these occasions did the patient expire on the Date of Death provided.
- In the remaining 8 cases, the patient either was discharged or signed out against medical advice as indicated, and the Date of Discharge provided was correct.

Once again, please be reminded that only Attachment A should be published. Thank you.

Sincerely,

Dennis A. Gowie
Executive Director

DAG/rw
Encl.

Attachment A

METROPOLITAN HOSPITAL CENTER

Metropolitan Health Plan
1901 First Avenue/97th Street
New York, NY 10029
212/230-6501

Office of the Executive Director

MEDICARE PROVIDER #: 330199

METROPOLITAN HOSPITAL CENTER

Metropolitan Hospital Center, one of the first public hospitals in the country, provides medical services for over 800,000 predominately poor Hispanic and Black residents in East Harlem. 16,673 inpatients are treated at Metropolitan per year, utliizing 188,502 inpatient days.

HCFA's national Medicare study of mortality rates is based entirely on an untested computer model that uses only patient billing information and does not include a medical chart review to determine if deaths were attributable to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for Metropolitan's high risk patient population, such as severity of illness, race, socioeconomic status and the effect of multiple diseases on a patient's prognosis.

DATA QUALITY

HCFA's files contain 93% of Metropolitan's deaths but only 89% of its total Medicare patients, which inflates HCFA's "actual" death rates. Paid claims figures from Medicare's fiscal agent indicate an "actual" death rate 1 percentage point lower than the HCFA report, bringing Metropolitan Hospital within the predicted range.

	Cases	Deaths	Death Rates
HCFA Report	1178	210	18%
Medicare Paid Claims Data*	1324	226*	17%

Similar under-reporting of live cases inflates Metropolitan's mortality rates in the only two diagnostic categories in which the "actual" rate appears to be over the HCFA predicted range. Using more complete billing data, Metropolitan is within the "predicted" range in every category. We urgently request that "actual" rates be corrected before the study's publication. We are willing to supply paid claims files to support our counts.

We reviewed a sample of all death cases reported by HCFA to ensure that quality care was provided. (The APACHE I chronicity evaluation tool was used to determine the degree of impairment caused by the patient's health problems up to 3-6 months before admission.) Patients with the highest degree of impairment (i.e., severely limited in activity) include those bedridden or unable to work because of their illness or those that require weekly visits to a physician.

*Includes deaths after discharge reported by HCFA.

MEDICARE PROVIDER #: 330199
Metropoitan Hospital
Attachment A Cont'd

OVERALL ANALYSIS (116 of 210 reported deaths reviewed) - Of these cases, 62% were brought to the ER by ambulance. 70% of the cases were severely limited in activity by the severity and nature of their disease prior to admission. 31% of the sample expired within 24 hours of admission. 51 cases or 44% died in the ICU, and 15 cases died within 48 hours of admission to the ICU. Patients averaged 5.1 secondary diagnoses.

Of the sample of 116, 47 or 41% of the cases were transferred-in. 43 or 92% of the transfer cases were bedridden or unable to work because of their illness before admission. Four transfers were from acute care hospitals and 43 were from nursing homes and other long term care facilities.

SEVERE ACUTE HEART DISEASE (30 of 37 reported deaths reviewed) - The chronicity evaluation indicated that 63% of the patients were severely limited in activity or incapacitated before admission. Patients averaged 4.8 secondary diagnoses. 19 cases or 63% died within 24 hours. Of these 19 deaths, 37% were transferred from nursing homes and other long term care facilities.

CEREBROVASCULAR ACCIDENTS (13 of 20 cases reviewed) - These stroke patients averaged 5.8 secondary diagnoses. Nine or 69% of the 13 were severely limited in activity or incapacitated before admission. Two were transfers from another facility. Nine deaths occurred in the ICU.

Metropolitan Hospital will continue its efforts to improve health outcomes for all its patients. Its ongoing review of medical records and 100% review of all patient deaths will continue as part of a comprehensive quality assurance monitoring program.

Attachment B

METROPOLITAN HOSPITAL CENTER
HCFA DATE OF D/C /DEATH VS ACTUAL PT DISPOSITION/DATE (DIED AT MET = Y)

NAME	MR #	DX CAT	D/C DATE	DEATH DATE	DIED MET	D/C MET	COMMENTS
[redacted]		GC	08/25/86	08/31/86	Y	N	PT DIED AT METROPOLITAN HOSPITAL ON 8/25/86.
[redacted]		GI	12/04/86	10/14/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 12/4/86.
[redacted]		HM	08/09/86	08/12/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 8/9/86.
[redacted]			03/16/86	03/19/86	Y	N	PT DIED AT METROPOLITAN HOSPITAL ON 3/16/86.
[redacted]			11/13/86	11/30/86	Y	N	PT DIED AT METROPOLITAN HOSPITAL ON 11/13/86.
[redacted]		HS	02/08/86	02/10/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 2/8/86.
[redacted]		PN	10/07/86	09/09/86	Y	N	HCFA HAS DATE OF DEATH ONE MONTH PRIOR TO DATE OF DISCHARGE ! PT EX-PIRED AT METROPOLITAN 10/7/86.
[redacted]			11/08/86	11/15/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 11/8/86.
[redacted]			11/08/86	11/30/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 11/8/86.
[redacted]		TR	11/20/86	11/30/86	Y	N	PT EXPIRED AT METROPOLITAN HOSPITAL ON 11/20/86. PT NAME IS O'FLAHERTY.
[redacted]		UN	06/08/86	06/09/86	Y	N	PT EXPIRED 6/8/86 AT METROPOLITAN HOSPITAL.

METROPOLITAN HOSPITAL CENTER
HCFA DATE OF D/C /DEATH VS ACTUAL PT DISPOSITION/DATE (DIED AT MET = N)

NAME	MR #	DX CAT	D/C DATE	DEATH DATE	DIED MET	D/C MET	COMMENTS
[redacted]		CA	01/27/86	01/28/86	N	Y	PT SIGNED AMA WISHED TO GO HOME WITH FAMILY ON 1/27/86.
[redacted]		GC	01/24/86	01/25/86	N	Y	PT DISCHARGED TO B.S.COLER HOSPITAL ON 1/24/86.
[redacted]		GU	02/04/86	03/02/86	N	Y	PT DISCHARGED FROM METROPOLITAN HOSPITAL ON 2/4/86.
[redacted]			10/06/86	10/26/86	N	Y	PT SIGNED OUT AMA TO GO TO THE MANHATTAN VA HOSPITAL ON 10/6/86
[redacted]		HL	04/14/86	04/30/86	N	Y	PT DISCHARGED HOME ON 4/14/86.
[redacted]		HM	08/19/86	08/31/86	N	Y	PT DISCHARGED HOME ON 8/19/86.
[redacted]		UN	07/14/86	07/28/86	N	Y	PT DISCHARGED HOME ON 7/14/86.
[redacted]			10/15/86	10/31/86	N	Y	PT DISCHARGED FROM MET ON 10/15/86.

NEW YORK STATE
OFFICE OF MENTAL HEALTH

MIDDLETOWN PSYCHIATRIC CENTER
141 Monhagen Avenue
P.O. Box 1453, Middletown, N.Y. 10940
(914) 342-5511

October 2, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We have reviewed the information provided and found all the diagnoses, two ages, and one date inaccurate. Attached you will find a listing with all inaccuracies corrected.

It should be noted that hospital No. 330362 is the acute medical unit of a large psychiatric hospital and performs no invasive medical procedures. Three of the patients listed received surgery at a local general hospital prior to the admission listed here.

Sincerely,

Jennifer Schaffer

Jennifer Schaffer, Ph.D.
Acting Executive Director

Attachment

MIDDLETOWN PSYCHIATRIC CENTER
CARING FOR THE MENTALLY ILL SINCE 1874

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Montefiore

Montefiore Medical Center

111 East 210th Street
Bronx, New York 10467
Telephone 212 920-2001

In association with
Albert Einstein College of Medicine

October 27, 1987

Spencer Foreman MD
President

William L. Roper, MD
Administrator
Dept. of Health & Human Resources
Health Care Financing Administration
Hubert Humphrey Building
200 Independence Avenue, SW
Washington, DC 20201

Re: Montefiore Medical Center
M/C ID 330059

Dear Dr. Roper:

We have received and reviewed the results of HCFA's study of Montefiore Medical Center's 1986 mortality statistics and we would like to take this opportunity to comment on both the quality of the HCFA data and the method that was used to predict expected mortality.

Because HCFA has used only the last 1986 hospitalization for each patient in this analysis, we were not able to confirm the total number of cases. Clearly, some patients will have been hospitalized at another acute care hospital in 1986, after discharge from Montefiore. Nevertheless, our records reflect 20% more cases than your report contains (see attached for detail by diagnostic category). We are concerned that HCFA may be under-counting cases and that this may have introduced a bias into the study.

We are also concerned that HCFA was not able to include disease severity or stage of illness in its model. The only category in which Montefiore exceeded the expected mortality rate was called "Low Risk Heart Disease" (the expected rate was 4%-7%; Montefiore's mortality rate was 8%). A tertiary care cardiology referral center like Montefiore treats a large number of patients with complicated, advanced or severe cases of what would otherwise be a "low risk" diagnosis. Many of these patients are transferred to us from another hospital or nursing home because their condition could not be adequately treated.

Henry and Lucy Moses Division
The Jack D. Weiler Hospital of the
Albert Einstein College of Medicine
Beth Abraham Hospital
Family Health Center
Loeb Center Skilled Nursing Facility
Montefiore Home Health Agency

Montefiore Medical Group
Montefiore Comprehensive Health Care Center
Montefiore-Rikers Island Health Services
Valentine Lane Family Practice
Affiliated with:
North Central Bronx Hospital
Nathan Miller Center for Nursing Care, Inc

We understand that the HCFA model includes transfer from another acute care hospital, but not transfer from a nursing home. We have found that patients in the low risk heart disease category transferred to us from a nursing home had an extremely high mortaly rate:

LOW RISK HEART DISEASE
(Medicare Cases - Last 1986 Hospitalization)

Admitted From	All Cases	%	Deaths*	Mortality Rate
Direct	1,075	83.3%	56	5.2%
Nursing Home	30	2.3	5	16.6
Other Hospital	186	14.4	15	8.1
	1,291	100%	76	5.9%

*Includes in-hospital deaths and those cases that HCFA claims died post-discharge.

In addition, the HCFA model, as we understand it, takes up to four secondary diagnoses into account. We have found that a very large proportion of our Low Risk Heart Disease patients have more than four secondary diagnoses and, further, that these patients have a very high mortality rate:

LOW RISK HEART DISEASE
(Medicare Cases - Last 1986 Hospitalization)

Total	Cases	%	Deaths*	Mortality Rate
4 or Fewer 2° Diagnoses	997	77.6%	35	3.5%
5+ 2° Diagnoses	294	22.8	41	13.9
	1,291	100%	76	5.9%

*Includes in-hospital deaths and those cases that HCFA claims died post-discharge.

HCFA Mortality Study Verification
Data Include the Last 1986 Hospitalization
For All Medicare Cases

	Diagnostic Category	Cases per HCFA	Cases per MMC	% "Missing"
CA	Cancer	964	1,169	17.5%
CE	Cerebrovascular Accidents	275	388	29.1%
EY	Ophthalmologic Disease	468	604	22.5%
GC	Gastrointestinal Catastrophe	268	322	16.8%
GI	Gastrointestinal Disease	682	848	19.6%
[illegible]	Urologic Disease	514	643	20.1%
GY	Gynecological Disease	42	51	17.6%
HL	Low Risk Heart Disease	982	1,291	23.9%
HM	Severe Chronic Heart Disease	371	490	24.3%
HS	Severe Acute Heart Disease	350	459	23.7%
ME	Metabolic/Electrolyte Disturbance	120	159	24.5%
OP	Orthopedic Disorders	274	342	19.9%
PN	Pulmonary Disease	620	806	23.1%
RN	Renal Disease	122	162	24.7%
SE	Sepsis	69	77	10.4%
TR	Severe Trauma	244	305	20.0%
UN	All Other Conditions	2,353	2,803	16.1%
	All Causes	8,718	10,919	20.2%

MMC Data Source: Medical Records Database (10/20/87)

In summary, Montefiore Medical Center is a regional referral center for patients with heart disease (among many others). A significant proportion of cases in the Low Risk Heart Disease category (16.7%) are transferred to us, either from another hospital or from a nursing home and are certainly extremely ill. These transferred patients have a mortality rate nearly twice as high as the direct admits. Furthermore, a great many of these "Low Risk" cases - 23% - have four or more secondary diagnoses (which indicates that they have significant co-morbidities and/or complications), and are four times more likely to die than the patients with fewer secondary diagnoses. We believe that these data indicate that Montefiore Medical Center is treating a population of patients who are severely ill with what would otherwise be a low risk disease, and that the slightly higher than expected mortality rate is due entirely to this severity.

Sincerely,

Spencer Foreman, MD
President

SF:mam

Attach.

cc: Daniel Sisic (GNYHA)
Kenneth Raske (HANYS)

THE MOUNT SINAI MEDICAL CENTER
ONE GUSTAVE L. LEVY PLACE • NEW YORK, N.Y. 10029

Mount Sinai School of Medicine • The Mount Sinai Hospital

MEDICARE PROVIDER #330024

Wendy Z. Goldstein
Vice President
Hospital Operations

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 309-G
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper:

This replies to your letter of September 21, 1987 requesting our hospital to review and respond to 1986 mortality information which is to be released later this year.

Our staff has reviewed both the methodology and the data provided. Our comments regarding methodology are adequately reflected in the position papers submitted by the Greater New York Hospital Association and the American Hospital Association. We concur with the concerns which they have communicated to you.

Our review of the data itself led to the identification of several errors relative to the numbers of patients who died in the hospital and post-discharge. Furthermore, two of the cases identified by HCFA as having expired in the hospital were, in fact, discharged alive. A summary of our findings is attached for your review.

We will maintain the detailed records of the data, and would be glad to provide this to you upon request.

Sincerely,

Wendy Z. Goldstein

WZG/mlr
Attachment

1987 NOV -3 AM 9:03
HCFA/EXEC.SEC.

Copy to:
Barry Freedman
Nathan Kase, M.D.

SUMMARY

Upon validation, The Mount Sinai Hospital identified that data supplied by HCFA for eight (8) of the seventeen (17) (47%) diagnostic categories (listed below) were erroneous (see attached comparison table) relative to the number of patients who died in the Hospital and post-discharge:

Cancer (Ca)

Cerebrovascular Accidents (CE)

Low Risk Heart Disease (HL)

Severe Chronic Heart Disease (HM)

Severe Acute Heart Disease (HS)

Metabolic/Electrolyte Disturbances (ME)

Pulmonary Disease (PN)

Other Diagnoses (UN)

Two (2) cases were identified by HCFA as having expired in the Hospital, when in fact they were discharged alive.

Fourteen (14) cases were identified by HCFA as having expired post-discharge, when in fact they expired in the hospital. Thus, in all of these cases, dates of death were incorrect.

In addtion:

Two (2) cases identified by HCFA as having expired post-discharge had incorrect hospital discharge dates.

Two (2) cases were identified by HCFA as having dates of death before dates of hospital discharge.

Two (2) cases identified by HCFA as having expired in the Hospital, had incorrect hospital discharge dates and thus, incorrect dates of death.

ANALYSIS OF REPORTING ERRORS

Diagnostic Category			Deaths Reported by HCFA		Deaths Verified by Hospital[a]	
			In-hospital	Post-hospital	In-hospital	Post-hospital
CA	--	Cancer	134	22	137[b]	18
CE	—	Cerebrovascular Accidents	24	4	25	3
GC	—	Gastrointestinal Catastrophes	22	1	22	1
GI	—	Gastrointestinal Disease	22	5	22	5
GU	--	Urologic Disease	9	1	9	1
GY	—	Gynecologic Disease	0	0	0	0
HL	—	Low Risk Heart Disease	16	5	17	4
HM	—	Severe Chronic Heart Disease	28	6	29	5
HS	—	Severe Acute Heart Disease	35	5	35[c]	4
ME	—	Metabolic/Electrolyte Disturbances	14	2	14	2
OP	—	Orthopaedic Disorders	0	0	0	0
PN	—	Pulmonary Disease	75	17	80	12
RN	—	Renal Disease	7	0	7	0
SE	—	Sepsis	20	1	20	1
TR	—	Severe Trauma	6	1	6	1
OP	—	Ophthalmologic Disease	0	0	0	0
UN	—	Other Diagnoses	102	12	103	11
Total -- All Categories			514	82	526	68

Notes

[a] "Post-hospital" deaths could only be verified to the extent that it was determined that the patients did not expire in the Hospital.

[b] One patient noted by HCFA to have died in the Hospital was actually discharged alive.

[c] One patient noted by HFCA to have died in the Hospital was actually discharged alive.

NASSAU COUNTY MEDICAL CENTER
2201 HEMPSTEAD TURNPIKE • EAST MEADOW, N.Y. 11554 • 516 542-0123

BOARD OF MANAGERS

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DONALD H. EISENBERG
EXECUTIVE DIRECTOR

October 21, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Re: Nassau County Medical Center
Medicare #33-0027

Gentlemen:

To understand the Medicare mortality rate at this institution, one would have to understand the role of this hospital in our community.

Nassau County Medical Center is a major teaching hospital in the two-county region of Nassau and Suffolk and the major trauma center. It is well known to all in the area that the more seriously sick and injured patients will come to the medical center and more than 1,000 patients a year are transferred here from other hospitals. In fact, more than a third of all the life-threatening injury cases in the entire region are brought by ambulance or helicopter to the medical center. It is also significant that we have the only burn center in the two-county region, one of the two hospice programs in the area and that we are the only AIDS referral center in Nassau County.

Despite this, the Nassau County Medical Center has an overall mortality rate of 3.9 per cent, only slightly higher than the 3.6 per cent average of all the community hospitals of Long Island, and lower than some of these community hospitals.

We are also the only public hospital in a County of 1.3 million people. This means of course that many of our patients have limited means. They too often delay seeking medical care in favor of other necessary expenditures and often present with advanced disease. In addition, more than 900 Medicare patients a year are transferred to us from local nursing homes. Their average age is 79.5 years and they also often arrive in gravely ill condition. Other patients -- as many as 50 at any given time -- who need post-hospital institutional care cannot get into other facilities because of their inability to pay or because of a severe lack of nursing home beds in this area. An average of 5 patients per month die here while waiting for such placement.

CLINICAL CAMPUS; STATE UNIVERSITY OF NEW YORK AT STONY BROOK: HEALTH SCIENCES CENTER
H-122

Although these circumstances go a long way toward explaining our Medicare mortality rate, the hospital took a particularly close look at the diagnostic categories that most profoundly affect that rate. Because pneumonia accounted for 15 per cent of total Medicare deaths here during 1986, we reviewed the medical records of a large sample of these patients to ascertain whether their "higher-than-predicted" mortality rate could be attributed to any failure of medical care. We found no evidence to suggest that any of these patients received less than excellent care, and that our experience compared very favorably with that of other hospitals.

Sincerely,

Donald H. Eisenberg
Executive Director

DHE:mm

New Rochelle Hospital Medical Center
16 GUION PLACE, NEW ROCHELLE, NEW YORK 10802 · 914 632-5000

GEORGE A. VECCHIONE
PRESIDENT

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

New Rochelle Hospital Medical Center is proud of its long standing commitment to outstanding medical care to the community. Recognition of this is exemplified by its continued accreditation by the Joint Commission on Accreditation of Healthcare Organizations, the approval by the Liason Committee on Graduate Medical Education of the American Medical Association for providing under-graduate and post-graduate educational programs and by the American College of Surgeon's certification as a Comprehensive Clinical Cancer Program.

New Rochelle Hospital Medical Center is an acute care facility licensed by the State of New York, that regularly admits over 40% of its patients through the Emergency Room. In the recent Health Care Financing Administration mortality study, our analysis of the cited mortalities revealed that 92% of these patients were admitted on an emergency status and, 29% were in fact transfers from local long term care facilities, underscoring the high severity of illness among these patients.

A review of the Health Care Financing Administration mortality study reveals New Rochelle Hospital Medical Center was within the predicted range of mortality for all the seventeen categories that agency examined.

Our analysis of the data revealed that HCFA's classification of the cases into the seventeen categories was for the most part correct. However, discrepancies were revealed as follows: Among the forty-two patients stated to have died elsewhere, there were ten who actually died while still in the hospital. There were discrepancies in regard to the date of birth in forty-five cases. These flaws evidence the inaccuracy of the raw data used in the Health Care Financing Administration model.

New Rochelle Hospital Medical Center has in place an established Quality Assurance Program. The program requires the review of all mortalities as well as a broad range of quality issues and serves as an on-going monitor to insure the continued provision of the extremely high quality medical care which is available at our Hospital.

In the overall assessment of the value of this study one must consider the ideological concept, yet to be proven, that mortality in itself relates to underlying quality issues.

Lastly, the Health Care Financing Administration's Department of Health and Human Services itself states "that the data are not measures of hospital performance and we cannot and do not recommend the use of the information by itself to make judgment about the quality of care in an individual hospital".

Sincerely,

George Vecchione

George A. Vecchione
President

GAV:r

THE
NEW YORK INFIRMARY
BEEKMAN DOWNTOWN
HOSPITAL

170 William Street
New York, New York 10038
(212) 312-5000

Medicare Provider #330064

Upon receipt of the Health Care Financing Administration's (HCFA's) mortality data for New York Infirmary - Beekman Downtown Hospital, (NYIBDH) an immediate assessment of the information and findings was conducted. This analysis included the in-depth review of the patient's medical record by physicians and administrators against acceptable standards of quality care. Particular attention was paid to the category of Pulmonary Diseases.

According to the H.C.F.A. data, the predicted mortality rate for pulmonary patients should be 15 to 29%. NYIBDH actual rate was 29%. The review of the patient charts for this category revealed significant information:

.Average age of the patients was 80.5 years
.The most frequent age (median) was 81 years

The age of the patients in it self is explanation of the higher mortality rate within the category. However, there are other reasons. The socio-economic and ethnic background of our patients are important factors in patients' condition which were not considered.

The percentage of Medicare and Medicaid of the total number of patients admitted to the hospital is 44% and 15% respectfully. Limited resources influence the patient ability to comply with proscribed treatments. The patient population at NYIBDH is 33% Asian. Most are direct immigrants from China. Culturally, these patients ascribe to eastern medicine first and western medicine is sought usually only as an alternative. This results in our patients being more seriously ill when they finally seek medical care and are admitted.

Other issues which influence the mortality data are related to design flaws of the HCFA Study. Specifically, severity of illness (degree of illness) of the patient is not considered. Although four co-diagnosis were selected to consider in the study, many patients have additional diagnosis (i.e. diabetes) which have substantial impact on their health out-comes. The chronic nature of the patient diseases (i.e. the length of time the patient has been ill with the disease) also has not been considered. Many patients, by virtue of their age (greater than 80 years) were severely debilitated by their long-term illness. Many were nursing home residents.

The last reason for the higher range for mortality in Pulmonary Disease category may have been to improper coding of the charts. Upon review of the charts, it was determined that seven (7) of the charts should have been coded to four other categories. This results in a reduction in the actual mortality rate from 29% to 25%. Steps have been implemented to correct this issue.

The HCFA Mortality Study is a attempt to provide information to consumers on the care provided at hospital, it is not a complete measure of the quality rendered. It is a beginning.

The HCFA mortality information does help the Physicians and Administrators of NYIBDH to focus their on-going efforts in terms of quality assurance. We do provide high quality patient care and will continue to use all available sources of information ; from patients, relatives, staff as well as governmental agencies, to strive to improve patient care and serve our community. We will continue our efforts to educate our service population in the need for early diagnosis and treatment as well as preventive health care.

NEWARK - WAYNE COMMUNITY HOSPITAL, INC.

P.O. Box 111, Driying Park Avenue
Newark, New York 14513
Telephone (315) 332-2022

L. J. Danehy
President

COMMENTS ON THE HCFA MORTALITY DATA

After review and careful analysis of the Health Care Finance Administration's (HCFA) most recent study of mortality statistics to be released later this year, Newark-Wayne Community Hospital finds the methodology, some of the specific data, and the selection of this type of study as missing the mark of the original intent of HCFA. While we fully support any process that will provide institutions information that will improve health care delivery, and in fact this study does provide somewhat of a barometer to that end, the intrinsic conclusions that might be drawn from this new methodology remain limited in both scope and content, leading to faulty representation of hospital-specific performance levels. Our concerns are as follows:

1. In the methodology of the study, there is no accountability for the severity of the patient's illness only for the age, diagnosis and certain complicating conditions. Variations from patient to patient and from facility to facility may be great. Thus, one hospital working with much sicker patients may fall within or outside an expected range of mortality rates at a different point than the facility with an average patient illness that are not as severe. It would be a dangerous and faulty conclusion to compare one to the other based only on the criteria collected in the study.

2. Community-based smaller hospitals including Newark-Wayne and the other Finger Lakes hospitals are subject to recording mortality data for terminally ill patients that are treated in larger hospitals in Rochester for the illness, and transferred to the smaller hospital closer to home and family, just prior to death. Thus, the mortality statistic is recorded by the local institution that last admits the terminal patient, when in fact most of the treatment was performed by the larger institution.

3. The model itself claims a 95% confidence interval, leaving up to 5% of error in each of the statistics released by HCFA. This alone questions the conclusions that can be drawn from specific data. Furthermore, the severity of illness and other factors such as recording a "probable death" after discharge challenge even the 95% confidence, leaving the data even more wide open to misinterpretation, especially as it relates to overall institutional performance.

4. Above all, the decision of selecting mortality data as a means to study performance of health care delivery is intrinsically misleading, especially to the consumer. Publishing some or all of this data by the media for review by the layperson will only lend itself to a snap conclusion of "How my hospital rates against others." A consumer's conclusion will be based on an erroneous methodology and data that is suspect. Paramount to this is the chilling thought that mortality statistics published alone are the most accurate reflection of an institution's quality of treatment and care.

In conclusion: This 1987 HCFA Mortality Study methodology and subsequent distribution of hospital-specific data does not meet its objectives in methodology and content and is of limited use to both consumers and institutions of health care.

Sincerely,

L.J. Danehy

New York City Health and Hospitals Corporation

NORTH CENTRAL BRONX HOSPITAL
3424 Kossuth Avenue
Bronx, New York 10467
(212) 920-7171

Medical Provider # 330385

North Central Bronx (NCB) Hospital provides a full array of health services to one of New York's most culturally diverse populations. Each year over 75,000 visits are made to the emergency room and 49 clinics and 107,360 days of inpatient care are provided.

HCFA's study of Medicare mortality rates is based entirely on an untested computer model that uses only patient billing information and does not include a medical chart review to determine if deaths were attributable to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for NCB's high risk population, including patient race socioeconomic status, the severity of illness and the effect of multiple diseases on patient prognosis. 72% of NCB's Medicare patients are poor, 55% are black or non-white, 84% are admitted as emergencies and 15% require more than one admission a year.

DATA QUALITY

HCFA's files contain 90% of NCB's deaths but only 73% of total Medicare patients, which inflates HCFA's "actual" death rates. Paid claims figures from Medicare's fiscal agent (for 1986 cases billed through June 30, 1987) indicate an "actual" death rate 3 percentage points lower than the HCFA report bringing NCB within the predicted range (10-17%). .

	Cases	Deaths	Death Rates
HCFA Report	998	178	18%
Medicare Paid Claims Data	1359	198*	15%

* includes deaths after discharge reported by HFCA.

Underreporting of cases also inflates the NCB mortality rates in the only diagnostic category (gastrointestinal disease) in which the "actual" rate appears to be over HCFA's predicted range. Using more complete billing data, NCB is not over the "predicted" range for any category.

We urgently request that a correction to include all of NCB's patient be made before the study's publication. We are willing to supply paid claim files to support our counts. (Other errors in HCFA data are outlined on the attachment.)

Nevertheless, NCB reviewed a sample of all death cases reported by HCFA to ensure that quality care was provided. The APACHE I chronicity evaluation tool was used to determine the degree of impairment caused by the patient's health problems 3-6 months prior to admission. Patients with the highest degree of impairment (i.e., severely limited in activity) include those who were bedridden, those unable to work because of their illness or those that required weekly physician visits.

OVERALL ANALYSIS (80 of 178 deaths reported by HCFA reviewed) - 38% of all cases and 69% of all deaths had five or more secondary diagnoses. The chronicity evaluation indicated that 55% of the patients were limited in activity or incapacitated prior to admission. 10% of the deaths had been transferred in. 89% had an emergency priority. 16% of the sample died within 24 hours of admission and 32 cases (40%) died in the Intensive Care Unit.

GASTROINTESTINAL DISEASE (9 of the 11 deaths reviewed) The chronicity evaluation indicated that one-third of the patients were severely limited in activity or incapacitated before admission. 89% were admitted through the Emergency Room. One patient was transferred in and 22% were over age 85. These patients averaged 4.3 secondary diagnoses (71% had five or more secondary diagnoses.). Co-morbid and complicating conditions included alcoholic cirrhosis of the liver, liver cancer and congestive heart failure.

Our comprehensive review of these patient charts indicated that these patients came to NCB with a high degree of morbidity. North Central Bronx Hospital will continue its efforts to improve health outcomes for all our patients. Our ongoing review of medical records, including 100% review of in-patient deaths, will continue as part of the hospital's comprehensive program to monitor the quality of patient care.

NH Nyack Hospital
Generations of Service

EXPRESS MAIL

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sir/Madam:

Enclosed please find Nyack Hospital's response to the mortality data.

If you require any further information, please feel free to contact me at (914) 358-6200, x 2136.

Sincerely,

Gayle Kolt

Gayle B. Kolt, R.N., CPQA
Director
Quality Assurance/Risk Management

GBK/rbd
Enclosures

North Midland Avenue, Nyack, New York 10960 • 914-358-6200

NYACK HOSPITAL'S ANALYSIS OF HFCA MORTALITY DATA

The Hospital has performed a review of the data submitted. We found that we fell into the range of predicted mortality rates in all categories. It is significant to point out that these statistics relate only to Medicare patients. There were 390 Medicare patients in the sampling; 120 from Skilled Nursing/ Health Related Facilities. 56% of the total number of cases were admitted through our emergency room services. The majority (51%) of the total number of patients sampled were within an age distribution of 81 through 99 years of age. Severity of illness information was not calculated nor accounted for in the statistical findings.

While the data can be useful, mortality data in and of itself is not an indicator of quality. Such data cannot be used directly as a measure of hospital performance.

There were several discrepancies noted in the compilation of data concerning age distribution and incorrect date of death.

Mortality data without further inquiry and analysis lacks the necessary context to provide a true measure of hospital performance.

1555 Long Pond Road
Rochester, New York 14626
716/225-7150

PARK RIDGE HOSPITAL

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Department of Health and Human Services
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Sir:

On October 1, 1987 we received your September 21 correspondence including the calculation of mortality rates for Medicare patients admitted in 1986. Park Ridge Hospital's results, which all fall within your calculation of a "range of predicted mortality rates", have subsequently been reviewed by our medical staff and Board of Directors committees which oversee the operation of our quality assurance program.

We appreciate the opportunity to comment on your planned release of the mortality data and, per your request, will keep our comments brief and direct, as follows:

1. Need for Severity Adjustment
While efforts have been made to adjust for a number of different patient characteristics in your methodology, a major factor contributing to mortality not taken into account is severity of illness This omission places severe limitations on the validity and utility of your calculated rates. If you intend to continue to calculate and publish mortality rate data, it should be adjusted to appropriately incorporate severity adjustment. There are several sophisticated severity measurement systems which are available. Park Ridge Hospital has for over two years successfully integrated the MEDSGRPS severity adjustment system into our ongoing efforts to measure quality, evaluate patient outcomes, and identify associated trends. We feel severity adjustment is essential if a clinically valid approach to review of quality and evaluation of patterns of care is intended.

2. Individual vs. Aggregated Mortality Review
Individual mortality review as a method of conducting quality assurance has long been a part of ongoing hospital review activities. There is, however, a danger in attempting to reach "quality of care" conclusions from aggregrated mortality information, particularly absent a severity adjustment component. The clinical circumstances of mortality must be individually and systematically assessed before valid and reliable conclusions may be drawn regarding quality of care. The limitations on interpreting aggregated mortality data need to be continually stressed and should not be underestimated.

3. Out-of-Hospital Deaths
   Your inclusion of deaths which occur up to 30 days after admission to the hospital results in many (12%) being counted in the hospital's mortality data despite the fact that they are in many instances unrelated to the reason for admission. Either a shorter time period post-discharge or elimination of certain types of deaths (accidents, unrelated diagnoses, etc) should be considered for your future calculation of rates.

Finally, we would encourage careful consideration be given to the public statement you utilize to accompany the release of mortality data. The limitations of your methodology and the inability to draw specific conclusions should be highlighted to avoid misinterpretation of the results by the public.

Sincerely,

Timothy R. McCormick
President

/kab

The Presbyterian Hospital in the City of New York
Columbia-Presbyterian Medical Center, New York, NY 10032-3784

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 309-G
200 Independence Avenue, SW
Washington, D.C. 20201

Re: Medicare Mortality Data for the Presbyterian Hospital in the City of New York for the Year 1986

Dear Dr. Roper,

The following is an analysis of the Health Care Financing Administration (HCFA) 1986 Medicare Mortality Data for the Presbyterian Hospital in the City of New York. This analysis is only intended to function as a source of information to validate and improve upon the quality of the current and future mortality studies. We request that it not be published with the release of our data in December 1987.

On September 23, 1987 we received mortality rates and HCFA listing of 413 Medicare patients identified as dying within 30 days of admission in 1986. These patients were among 5,924 Medicare beneficiaries determined as inpatients in 1986 at the Presbyterian Hospital in the City of New York. In May of 1987, the Hospital reported in its Institutional Cost Report (ICR) that there were 10,625 Medicare discharges occurring in 1986. Therefore, from the HCFA study data, it appears that each of the 5,924 Medicare patients had an average of 1.8 discharges during this twelve month period.

Of the 413 deaths, 345, or 83.5 percent, were identified by HCFA as occurring while the patients were hospitalized at the Presbyterian Hospital. The remaining 68 deaths, or 16.5 percent, were shown by HCFA as occurring after discharge (within 30 days of admission).

Four sources were used during this 30 day review period to to measure the accuracy and precision of the 413 reported Medicare deaths. They included either the patient medical record, death certificates, the New York State Department of Health computerized discharge abstracts, or the Medicare billing summaries reported by Empire Blue Cross and Blue Shield of New York.

Babies Hospital • Dana W. Atchley Pavilion • The Edward S. Harkness Eye Institute • Harkness Pavilion • Neurological Institute
New York Orthopaedic Hospital • Presbyterian Hospital • Sloane Hospital • Squier Urological Clinic • Vanderbilt Clinic

This analysis was completed on October 26, 1987. The findings to date are as follows:

1. Of the 345 deaths reported by HCFA as occurring in 1986 at the Presbyterian Hospital, 338, or 98 percent were confirmed as in hospital deaths. Six (6) patient deaths remain to be confirmed and in one patient's record there is evidence which indicates that she was alive in August 1987.

2. Our review indicates that of the deaths identified by HCFA as occurring after discharge, 27 or 39.7 percent of the 68 patients were found to be Presbyterian Hospital in-hospital patient deaths (Appendix A). The possible cause for error in HCFA recorded dates of death may be the result of reporting errors that occur to the Social Security Administration. This function is not performed by hospitals and is usually done by surviving family members, funeral directors, etc. as part of the death benefit process.

3. As you have indicated it is not an easy task to perform follow-up upon those patients who were identified as dying after discharge. Your request that hospitals do not contact family members was an appropriate and sensitive directive. However, we found that in 68.2 percent of the remaining 41 patients identified by HCFA as dying after discharge, there is clear documentation to indicate that discharge prognosis was understood to be poor. In addition, family members and/or patients made specific requests to return home with supportive care and/or follow-up appointments while other patients were transferred to supportive care facilities such as skilled nursing homes or hospices.

4. A precision analysis was performed for six of the data elements (Appendix B). The results are listed below. These discrepancies between our Hospital's records and the HCFA data would most likely have an insignificant impact upon the actual and predicted mortality rates for the Presbyterian Hospital.

Date of Admission	9	Principal Diagnosis	9
Date of Discharge	6	Principal Procedure	5
Date of Death	27	Diagnostic Category	5

We appreciate the opportunity to review and comment on your data of our Hospital. We have taken these thirty days to focus upon the quality of reported deaths. With the exception of identifying out of hospital deaths, our findings conclude that the balance of the identified deaths by HCFA are well within acceptable levels of accuracy and precision.

It is clear that when using the HCFA regression model, the Presbyterian Hospital's actual mortality rates are within predicted levels. However, the Presbyterian Hospital in the City of New York recognizes that the statistical model used to generate these findings requires further development. Factors such as the complexity, intensity and other socio-medical conditions need to be considered. We would also like to emphasize that this analysis is an ongoing process and as part of our common goal to assure quality care to our patients we look forward to sharing the results of our continued review.

Sincerely yours,

Raymond R. Arons, Dr.P.H
Director, Office of Case Mix Studies

Attachments (2)

APPENDIX A

The Presbyterian Hospital in the City of New York
HCFA 1986 Medicare Mortality Study

CONFIDENTIAL

OBS	MEDREC NO	ADM DATE	DIS DATE	DEATH	AGE	SEX	PDX	PPROC	2nd DX	3rd DX	DRG	CAT	LOS	AD	DD	CORRECTIONS DTH	COMMENTS
[redacted]	[redacted]	120886	121086	123186	87	2	1970		427.5	v44.3	82	CA	2			121086	Patient died at PH 12/10
[redacted]	[redacted]	22286	30186	30386	85	2	1628	3491	5789	4254	82	CA	7			30186	Patient died at PH 3/1
[redacted]	[redacted]	120986	121586	123186	66	2	1983		1629	2765	10	CA	6			121586	Patient died at PH 12/15
[redacted]	[redacted]	91886	92286	93086	77	1	4280	9396	4150	2766	127	HM	4			92286	Patient died at PH 9/22
[redacted]	[redacted]	11886	20386	20486	66	2	53140	9960			174	GI	15			20386	Patient died at PH 2/3
[redacted]	[redacted]	122286	123186	11487	94	1	7991					UN	9	11287	11487	11487	Patient died at PH 1/14
[redacted]	[redacted]	31186	32286	32686	82	1	4101	3721	4280	4019	123	HS	11			32286	Patient died at PH 3/22
[redacted]	[redacted]	110586	112186	113086	83	2	1534	8761	419	2859	172	CA	16			112186	Patient died at PH 11/21
[redacted]	[redacted]	12186	12386	12186	76	2	7990	9921			101	UN	1			12386	Patient died at PH 1/23
[redacted]	[redacted]	32386	32786	32886	92	1	431	9604	9340		14	CE	4			32786	Patient died at PH 3/27
[redacted]	[redacted]	71586	71786	71886	101	2	388				417	SE	2	71687	71787	71787	Patient died at PH 7/17
[redacted]	[redacted]	40186	42586	42686	76	1	428	8866	5849	185	127	HM	24			42586	Patient died at PH 4/25
[redacted]	[redacted]	70786	71486	71586	93	2	9920		E9000		454	UN	7			71486	Patient died at PH 7/14
[redacted]	[redacted]	21786	21886	22886	74	2	20281		4275		403	CA	1			21886	Patient died at PH 2/18
[redacted]	[redacted]	81186	81786	81886	65	2	1985	9925	4275	1749	239	CA	6			81786	Patient died at PH 8/17
[redacted]	[redacted]	100386	101686	102286	67	2	53240	45130	4270	4280	416	GI	2	102086	102286	102286	Patient died at PH 8/17 HCFA w/o dis
[redacted]	[redacted]	31186	32386	32686	68	1	1972	3404	1625	1985	82	CA	12			32386	Patient died at PH 3/23
[redacted]	[redacted]	112086	112586	113086	86	2	5070				79	PN	5			112586	Patient died at PH 11/25
[redacted]	[redacted]	82486	82586	83186	70	1	33520		7991	496	12	UN	1			82586	Patient died at PH 8/25
[redacted]	[redacted]	110986	110986	113086	88	2	5579	9606	5781	4275	188	GC	1			110986	Patient died at PH 11/09
[redacted]	[redacted]	50986	51486	52486	74	2	4241	3521	4379	2754	105	HL	5			51486	Patient died at PH 5/14 OHRR
[redacted]	[redacted]	110786	111286	113086	73	2	5990	331	414	25001	320	GU	5			111286	Patient died at PH 11/12 MICU
[redacted]	[redacted]	70886	70886	70986	66	1	7863	9605	496	4275	99	UN	1	70886	70986	70986	Patient died at PH 7/09
[redacted]	[redacted]	71186	71786	73186	57	1	4359	9919	4140	25001	15	UN	6			71786	Patient died at PH 7/17
[redacted]	[redacted]	100486	101086	102686	67	1	1972	3491	1629	42789	82	CA	12	101486	102686	102686	Patient died at PH 10/26
[redacted]	[redacted]	111286	111486	113086	72	2	382	3404	2869	5849	416	SE	1		111486	111486	Patient died at PH 11/14
[redacted]	[redacted]	120186	122986	123186	66	2	1830	3893	1976	586	366	CA	28			122986	Patient Died at PH 12/29

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PROPRIATARY INFORMATION OF
THE PRESBYTERIAN HOSPITAL
IN THE CITY OF NEW YORK
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NY 216.3

APPENDIX B

The Presbyterian Hospital in the City of New York
HCFA 1986 Medicare Mortality Study

CONFIDENTIAL

OBS	MEDREC NO	ADM DATE	DIS DATE	LOS	AGE	SEX	PDX	PPROC	2nd DX	3rd DX	SER	DRG	CAT	AD	DD	DTH	PDX	PPR	COMMENTS
[redacted]	[redacted]	30886	32586	17	89	2	586	3.31	275.4	692.9	4	316	RN				5990		PDX=599.0
[redacted]	[redacted]	82286	82786	5	79	2	27	3.31	320.7	785.59	4	423	UN				785.59		PDX=785.9
[redacted]	[redacted]	101486	102586	11	93	2	238.7	99.151	451.2	427.5	4	403	UN	101686					ADATE=101686
[redacted]	[redacted]	60486	60786	3	81	1	410.7	87.03	427.5	348.1	4	123	HS	60386					ADATE=060386
[redacted]	[redacted]	12686	20386	8	66	2	519.1	33.12	799.1	493.9	4	96	PN				4104	3614	With COR PDX and PPR CAT=HS
[redacted]	[redacted]	50586	50586	1	87	1	514	0	410.9	414	4	87	PN					96.05	PP=96.01
[redacted]	[redacted]	61186	61386	2	80	1	185	0	414	428	4	346	CA				V58.1	99.25	Patient Recvd chemo CAT=UN
[redacted]	[redacted]	122285	11186	20	66	2	197.7	92.031	153.1	486	4	203	CA				153.1		SDX=197.7 Chemo CAT=UN
[redacted]	[redacted]	112686	120186	5	82	1	460	0	428	416	4	68	UN				491.2		PDX=492.3 CAT=PN
[redacted]	[redacted]	10986	11386	4	54	1	511.9	349.1	250	V45.81	16	86	GI				511.9		PDX=511.9 CAT=PN
[redacted]	[redacted]	70886	70986	1	73	1	38.9	99.21	208	250	4	416	SE				682.6		PDX=682.6
[redacted]	[redacted]	61786	61886	1	76	1	414	0	410.9	437.9	4	123	HL	61886					Died same day on 6/18 PM DC
[redacted]	[redacted]	70586	70686	1	72	1	38.9	96.05	185	198.5	4	416	SE	70686					Patient clocked in 12:30 AM 7/6
[redacted]	[redacted]	101486	102686	12	67	1	197.2	34.04	162.9	427.89	4	82	CA					34.91	PP=34.91
[redacted]	[redacted]	92386	100586	12	91	2	276.5	99.21	438			296	ME		100686				Discharge Date=10/06
[redacted]	[redacted]	100386	101686	2	67	2	532.5	45130	4270	4280		416	GI				380	99.21	PDX=380 and PPR=99.21

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PROPRIATARY INFORMATION OF
THE PRESBYTERIAN HOSPITAL
IN THE CITY OF NEW YORK
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phc Putnam Hospital Center Stoneleigh Avenue, Carmel, New York 10512 (914) 279-5711

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building - Room 314G
200 Independence Ave. S.W.
Washington, D.C. 20201

Re: Hospital Providor #330273

Dear Dr. Roper:

Putnam Hospital Center has received and reviewed the Hospital's mortality data as prepared by HCFA for the Medicare patients admitted during 1986.

It is acknowledged that through this effort, HCFA has attempted to better define mortality rates for use by hospitals, peer review organizations, and the public. Further, we at Putnam Hospital Center recognize that all of the above groups have a legitimate interest in obtaining useful, reliable information on the quality of care being rendered. However, while we might be tempted to take pride in the fact that Putnam Hospital Center's mortality rates fall either below or within the predicted mortality rates, we do not believe that, taken alone, these mortality rates should be used to indicate quality of care rendered here or in any institution. This limited data should be used only as one guide or focus amongst hundreds of other such indicators for peer review efforts.

Following review, our concerns can be categorized as follows: Methodology and Accuracy of HCFA Model, and the Public Perception of the Model.

Methodology and Accuracy of the HCFA Model

HCFA utilized as its basis, 1,118 cases vs. the actual Putnam Hospital Center Medicare admissions of 2,006. In the HCFA study, all hospitalizations over 30 days were eliminated, as well as all but a single hospitalization for each patient during 1986 (i.e., several patients had more than one hospitalization during 1986).

Our review of the report revealed five errors in the HCFA data, all with regard to the date and location of the patients' death.

The HCFA model appears to base the outcome of death as the indication for quality of patient care in an institution. However, there is no provision for adjustment in the severity of patient illness and patient characteristics. For instance, vehicular accidents in Putnam County are higher than regional or statewide averages. Thus, one could expect that this would influence the number of deaths within certain categories such as major trauma. There is no adjustment for this factor in the formula. The model also lacks the flexibility to correlate the admitting and principal diagnosis with the actual reason for death. For example, a patient who was treated at Putnam Hospital Center for a fractured hip and expired two weeks after discharge due to an unrelated car accident would be counted in the Putnam Hospital Center death rate. The model arbitrarily eliminates all cases with a length of stay over 30 days, and only looked at the last admission of Medicare patients during 1986. In addition, contributing patient characteristics such as stage of illness, as well as general health status, was not considered.

Public Perception of the Model

The HCFA report, as published, will reveal only predicted vs. actual mortality rates. Additional information should be made available to the public such as, of the patients who died within 30 days of admission, the average age was 80 years with the source of admission being 29% from either an extended care facility or an acute hospital transfer.

Also, of the patients who expired after discharge, our limited ability to verify these indicated that the status at time of death of those who died after discharge was: 55% died in a nursing home, 27% in a terminal care facility, and 18% at home.

It is important to stress to the public that each institution has in place and is continuing to develop mechanisms to review and, therefore, improve the quality of the care and services that it renders. The outcome measurement of patient death alone does not adequately reflect quality of care.

Putnam Hospital Center recognizes that consumers have a legitimate interest in obtaining useful, reliable information on the quality of care that is available to them. The major criticism of the HCFA data is that mortality rates, by themselves, do not measure quality. Mortality data are appropriately used to guide or focus peer review. Quality can only be evaluated through the process of peer review -- not through simplistic statistical comparisons of one indicator which can cause unwarranted confusion and apprehension among Medicare beneficiaries and the public in general.

Putnam Hospital Center, in its comments to HCFA, has emphasized that the HCFA mortality data should be used principally to identify or suggest areas for review. The mortality data do not identify areas in which the hospital provides "high quality" or "low quality" care or otherwise measure hospital performance. A mortality rate higher than predicted does not confirm the existence of quality problems, just as a mortality rate lower than predicted does not establish that the hospital provides "high quality" care. Actual mortality rates can be higher or lower than predicted because the patients treated by the hospital differ from the patients treated in the "average" hospital, or because the care provided differs from the care provided in the "average" hospital, or simply because of chance. Comparisons of actual and predicted mortality rates can only suggest that the hospital and its medical staff review an area to determine if a quality problem exists or if the patients treated by the hospital are simply unusually complex or have other characteristics not recognized by the HCFA model that would provide more meaningful information than an "average" mortality rate.

Sincerely,

WR Wedral

WILLIAM R. WEDRAL
President

WRW:jf

QUEENS HOSPITAL CENTER

New York City Health And Hospitals Corporation
82-68 164th Street, Jamaica, New York 11432
(718) 990-3377

Affiliated with
Long Island Jewish - Hillside Medical Center
Health Sciences Center / S.U.N.Y. Stony Brook

HCFA MORTALITY COMMENTS

Queens Hospital Center (QHC), a tertiary care medical facility that serves southeast Queens, offers a full array of health services including diagnostic radiology testing and comprehensive testing and treatment in pulmonary function. We appreciate this opportunity to comment on HCFA's Medicare mortality package prior to its publication.

Several factors that would affect predictions of hospital mortality rates are not included in the model. Had these factors been included, the "predicted" mortality range for QHC would have been substantially higher. The following indicate some characteristics of the high risk Medicare population seen at QHC: 78% either have no secondary insurance or Medicaid as the only second payor; 65% are non-white; 85% are admitted with an emergency priority, and 19% are admitted more than once a year.

DATA QUALITY

HCFA files include 91% of QHC's Medicare deaths but only 78% of QHC's total patients. This underreporting of all patients inflates HCFA "actual" death rates. The paid claims figures (for 1986 cases billed through June 30, 1987) indicate an "actual" death rate 3 percentage points lower than the HCFA report, within the predicted range (9-16%).

Nevertheless, QHC reviewed the charts of 79 of 86 cases which fell into the three diagnostic categories, focusing on patient health status and their severity of illness. The APACHE I Health Evaluation Form was used to determine the degree of impairment caused by the patient's health problems up to 3-6 months before admission. Patients with the highest degree of impairment (i.e., severely limited in activity) include those who were bedridden or unable to work because of their illness or those that required weekly physician visits.

CEREBROVASCULAR DISEASE (30 of 31 reported deaths reviewed)

Ninety-three percent (93%) of these patients were mildly to severely limited in their activities before admission. The overwhelming majority experience CVA (i.e., stroke) before admission and were rushed to the hospital via ambulance. Patients averaged 3.8 secondary diagnoses including: paralysis, hypertension and previous CVA. Forty-six percent (46%) had five or more secondary diagnoses. Thirty-six percent (36%) were over age 80. Five had been transferred in: three from other hospitals and two from nursing homes.

SEVERE ACUTE HEART DISEASE (31 of 37 reported deaths reviewed)

Before admission, 81% were restricted in activity. Sixty-three percent (63%) died within 48 hours of admission. Forty percent (40%) had five or more secondary diagnoses. Patients averaged 4.1 secondary diagnoses overall including heart attack and coronary atherosclerosis. Thirty-six percent (36%) were 80 years or older; one case was transferred from a nursing home.

SEPSIS (18 of 18 deaths reviewed)

Before admission, 78% were severely restricted in activity or incapacitated, another 22% were mildly restricted. One-third of the patients died within 48 hours of admission. Fifty-six percent (56%) died in the ICU. Patients averaged 5.7 secondary diagnoses including chronic renal failure and diabetes. Fifty-six percent (56%) were 80 years or older. Four were transferred from nursing homes.

Our comprehensive chart review shows that these patient groups came to QHC with a high degree of morbidity. Queens Hospital Center will continue its efforts to improve health outcomes for all its patients. We routinely review the records of in-hospital deaths as part of our facility-wide quality assurance program. Comprehensive physician review of medical records is the only valid means to evaluate the quality of medical care.

Rochester
General
Hospital

1425 Portland Avenue • Rochester, New York 14621 • (716) 338-4000

The HCFA Mortality data released for Rochester General Hospital shows those patients that died as inpatients as well as those patients who died within 30 days of admission as outpatients. The use of a 30 day post-admission mortality rate resulted in the attribution to the hospital of deaths that may be unrelated (this amounted to 14.4% of all cases) to the condition of the patient that was under treatment at the time of discharge or that resulted from the management of the patient at home or in a post-acute care facility.

Actual mortality rates above the expected values we feel can be attributed to specific patient characteristics. Upon completing individual patient chart reviews we found over half the patients to be in a terminal stage of their disease and many of whom had specified a DNR (Do Not Resuscitate) level in accordance with hospital policy and procedure.

We also found the average age of the patients in this study was 80.3 years of age. The hospitals primary service area is located in the Northeast quadrant of Monroe County and has the highest concentration of over - 65 - year olds. In 1985 and 1986, patients over the age of 65 accounted for approximately 32% of the hospital's discharges and 51% of patient days. This older population has a much greater likelihood for a higher number of complications and comorbid states upon admission than a younger group of patients. Hence age, complications and comorbid states need to be taken into account when comparing one hospital's statistics with another.

Consumers should be cautioned when using this data to make quality judgments of where they should receive health care. Based on patients chart review, because of the mix of patients (i.e. number of terminal and/or DNR cases), the predicted mortality rate range can not be viewed as an achievable target for the hospital. The conclusion at Rochester General Hospital based on patient chart review in this particular study was two-fold:

1) In the large majority, the death was not unexpected at the time the patient was admitted or discharged.

2) Age, complications and comorbid states largely impacted our data and were not completely considered in the HCFA model.

Affiliated with the University of Rochester School of Medicine and Dentistry

NEW YORK STATE
OFFICE OF MENTAL HEALTH

ROCHESTER PSYCHIATRIC CENTER
MARTIN H. VON HOLDEN, D.P.A., M.A.
Executive Director

FRANK SOULTS, M.D.
Medical Director

WILLIAM McKENNA, M.B.A.
Director for Administration

PATRICIA J. ARCURI, R.N., M.S.
Director for Quality Assurance

GEORGE A. ROETS, R.N., M.S.
Director for Community Services

October 22, 1987

William L. Roper, M.D.
Administrator - HCFA
Health Standards & Quality Bureau
Hospital Mortality Information

Dear Dr. Roper:

As requested in your September 21, 1987 correspondence enclosed you will find verification of mortality information on selected medicare patients treated in 1986.

It is our understanding that this information as well as our comments will be published by your office in December 1987.

It is also our belief that in the public release of this information, HCFA will make it clear that the information on its own is not a complete measure of the quality of care at this facility.

Please do not hesitate to call if we can be of further assistance to you.

Sincerely,

Martin H. Von Holden, D.P.A.
Executive Director

Louise V. Smyth

Louise V. Smyth, R.R.A.
Supervising Medical Records Administrator

LVS:tlb

cc: William McKenna
Brian Brozost
File

1600 South Avenue, Rochester, New York 14620 ● (716) 473-3230

HOSPITAL ID NUMBER = 330367 ROCHESTER PSYCHIATRIC CENTER ROCHESTER, NEW YORK 14620

PATIENT ID NUMBER	SURNAME	FACILITY ADMIT DATE	DATE OF DEATH	COMMENT
[redacted]	[redacted]	03/03/78	02/18/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED THE DIAGNOSIS OF METASTATIC CARCINOMA FOR FOUR (4) YEARS.
[redacted]	[redacted]	08/20/85	03/10/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED THE DIAGNOSIS OF PROSTATIC CARCINOMA FOR FOUR (4) MONTHS.
[redacted]	[redacted]	08/09/84	11/16/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED THE DIAGNOSIS OF PNEUMONIA AND CARDIOPULMONARY ARREST.
[redacted]	[redacted]	08/06/81	12/08/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED THE DIAGNOSIS OF ARTERIOSCLEROTIC HEART DISEASE FOR MANY YEARS.
[redacted]	[redacted]	02/08/68	10/02/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED A DIAGNOSIS OF RESPIRATORY PNEUMONIA.
[redacted]	[redacted]	10/23/64	08/14/86	THE HHS LISTED DATE OF ADMISSION REFERS TO THE DATE THE PATIENT WAS ADMITTED TO THE MEDICAL SERVICES UNIT OF THIS FACILITY. THE PATIENT CARRIED A DIAGNOSIS OF PNEUMONIA AND CARDIAC ARREST.

SISTERS OF CHARITY HOSPITAL ▫ 2157 MAIN STREET, BUFFALO, NEW YORK 14214 ▫ (716) 862-2000

OFFICE OF THE PRESIDENT

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Doctor Roper:

This is a response prepared in answer to your letter of September 21, 1987, concerning selected mortality information about Medicare patients treated at Sisters of Charity Hospital in 1986.

The following comments are being made relative to the data which you sent us which, by the way, is still under review by the hospital's staff.

- The data is only suggestive, at best, of possible problems. However, the search, review, and analysis of such data reveals little due to the inadequacy of the data.

- Attempts to measure quality of care have faltered because the definition of quality care is diverse.

- The hospital has been grappling with the definition and measurement of quality through its various committees, processes and procedures in an attempt to develop a quality profile of the hospital services. However, our attempts have been frustrated in the same way the inadequacy of the mortality data fails in specificity.

- Our hospital intends to use the data as one of the guides in the hospital's quality assurance program.

- The hospital cannot analyze the mortalities which occurred 30 days after discharge.

- The mortality rates for the hospital appear to be within the range expected for those diagnostic categories indicated. The data fails to present sufficient specificity to evaluate those rates and our internal review is not complete at this time.

- The data would be more meaningful if the measure of clinical outcome extended beyond the hospital stay. As the data is presented now, it tends to unfairly point to the hospital and physicians as the providers responsible for the patient's death.

- The data as submitted by HCFA is correct except:

    (1) no verification has been made for patients whose death occurred in a year subsequent to the year of admission, and,

    (2) the correction of data is attached.

Over the long term, the purpose of the data release should be to assist providers in developing and monitoring the quality of care given in a hospital setting or any other health care setting for the betterment of patient care.

Thank you for this opportunity to comment.

Sincerely,

Sister Angela Bontempo

Sister Angela Bontempo
President

dh
Enc. (1)

Submitted by:
Sisters of Charity Hospital of Buffalo, New York

Sister Angela Bontempo
President

October 27, 1987

ERRORS IN DATA

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	72	2	61	2
CE -- Cerebrovascular Accidents	25	0	20	0
GC -- Gastrointestinal Catastrophes	8	0	7	0
GI -- Gastrointestinal Disease	17	1	14	1
GU -- Urologic Disease	6	0	2	0
GY -- Gynecologic Disease	0		0	
HL -- Low Risk Heart Disease	13		12	
HM -- Severe Chronic Heart Disease	43		36	
HS -- Severe Acute Heart Disease	33	3	30	3
ME -- Metabolic/Electrolyte Disturbances	13		8	
OP -- Orthopedic Disorders	6		5	
PN -- Pulmonary Disease	38	2	34	2
RN -- Renal Disease	5		5	
SE -- Sepsis	4		4	
TR -- Severe Trauma	7		7	
EY -- Ophthalmalogic Disease	1		0	
UN -- Other Diagnoses	55	2	47	2
Total -- All Categories	346	10	292	10

S&S
SOLDIERS & SAILORS
MEMORIAL HOSPITAL
THE HOMESTEAD
DUNDEE MEDICAL CENTER
418 North Main Street
Penn Yan, New York 14527-1085
315-536-4431

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore MD 21207

Medicare Provider #330097

Dear Sir:

This is to forward our comments on the mortality data transmitted to us. We have reviewed the data and have the following observations to make:

1. Our Quality Assurance Physician has given special attention to the low risk deaths. Six of those reported as low risk deaths have significant complicating factors which do not warrant the classification of these patients as low risk.

2. Treatment patterns in our region make it likely that mortality at S&S is higher than would otherwise be expected. For example, cancer patients will complete the final stage of their stay in S&S instead of regional referral centers more than an hour away from their home community.

Sincerely,

John D. Kelly
Administrator

JDK/sc

south
nassau
communities hospital
Over a Half Century of Community Health Leadership

2445 Oceanside Road, Oceanside, New York 11572
516/763-2030

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Gentlemen:

Monitoring and improving the quality of care received by Medicare recipients in hospitals is an important component of HCFA's mandate. We support its efforts to fulfill that mandate through careful and thoughtful analysis of mortality data. In addition, it is our opinion that HCFA's new methodology for estimating hospital mortality rates is a significant improvement over its earlier approach. However, we also believe that there remain a number of serious methodological flaws in HCFA's most recent study which severely limit the study's usefulness in accomplishing its goals and which may render the study's conclusions misleading to both the health care industry and the general public.

We are concerned about significant patient variables that are omitted, the aggregation of diagnostic codes, the failure to adequately control for regional and institutional characteristics and the proposed method of distribution and presentation of the results.

We look forward to the continued refinement of the data and clarification for the public as to what the data means and how it should be used.

Very truly yours,

Michael Rodzenko
Executive Director

MR:nc

St. Anthony
Community Hospital

COMMENTS ON THE HCFA MORTALITY DATA

The data used by HCFA indicate that a total of 545 Medicare patients were admitted to St. Anthony Community Hospital in 1986, and that a total of 62 died within 30 days of admission. Of these, 55 died while still a patient of the hospital, while 7 died after discharge. Our own records indicate that 1035 Medicare admissions occurred in 1986. Presumably this discrepancy reflects multiple admissions of individual beneficiaries to either this hospital or others. The number computed by HCFA excludes all but the last admission of Medicare beneficiaries to the hospital. We have no way of verifying whteher the number of Medicare patients treated at St. Anthony Community Hospital according to HCFA is correct. It is impossible to to determine the percentage of the 7 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

In one out of sixteen diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. This amounts to 4 patients, all of whose medical records were reviewed and it was determined that in all 4 cases, detah was the expected outcome/high probability at the time of admission(pts. chronically ill with terminal disease and the result of following pt's wishes re: no extraordinary measures to prolong life). In the other 15 diagnostic categories, the actual mortality rate is well in the middle or low end of the range. Without the detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis.

15-19 Maple Avenue * Warwick, New York 10990 * 914-986-2276

Member of Franciscan Sisters of the Poor Health System, Inc.

SAINT
FRANCIS
HOSPITAL

NORTH ROAD
POUGHKEEPSIE, NY 12601
914-471-2000

Executive Offices

Saint Francis Hospitals, Poughkeepsie and Beacon, New York
Medicare Provider Nos: 330067, 33T067, 33S067 (Poughkeepsie)
330186, 33V186 (Beacon)

RESPONSE TO HCFA MORTALITY DATA 1987

Overview

Saint Francis Hospital Poughkeepsie and Beacon, NY, both fall within the range of expected mortality in each of the 16 diagnostic categories analyzed by HCFA.

Consumers have a legitimate interest in obtaining valid, useful, reliable information on the quality of health care available to them. Mortality rates, however, by themselves, do not measure quality. This data is most effectively used to guide or focus the hospitals' quality assurance programs and peer review, which at present is the only method that is reliable for evaluating quality. Because mortality rates are easily misinterpreted, they can cause confusion and apprehension among Medicare beneficiaries and the public in general.

At issue concerning the HCFA data is the ability of the model to detect differences in quality, which has never been evaluated. The HCFA data assumes that each hospital's patients are "average" except with respect to the following few characteristics: principal diagnosis, the presence of certain selected complicating illnesses, sex and age, the number of times the patient was admitted to the hospital in the preceding 12 months, and whether the patient was transferred from another hospital. The model does not include measures of severity (how ill the patient was at time of admission), whether the patient was transferred from a nursing home, was being treated at home prior to admission, had a terminal illness, or information about the patient's psychological state or general health status. These factors would also influence the statistical rates. In addition, the HCFA data is not all inclusive. The mortality rates apply only to Medicare patients and differ from other indicators of inpatient mortality because they are calculated using only deaths that occurred within 30 days of the last admission of a Medicare beneficiary to a hospital in 1986.

Saint Francis Hospitals' Review of Data

The cases included in the report for Saint Francis Hospitals Poughkeepsie and Beacon were reviewed by the Medical Records Department. All cases were correctly identified as Saint Francis cases and the dates of discharge and death were validated. Approximately 15% of the cases listed expired outside of the hospital within 30 days of discharge.

Saint Francis Hospitals
Poughkeepsie and Beacon, New York

Mortality Review at Saint Francis Hospitals

All mortalities occurring in the hospital are subjected to intensive retrospective review as one part of our Quality Assurance Program. Cases are screened by medical record coders at the time of discharge (death) and immediately classified as anticipated or not anticipated based on criteria developed by the Medical Staff. Deaths not anticipated are reviewed immediately by the Quality Appraisal Steering Committee and the appropriate departments. Cases are further classified by severity of illness into: Class I - Death anticipated; Class II - Death not expected by due to factors beyond the control; Class III - Death not expected but accompanied by appropriate care to which the patient did not respond; Class IV - Death not anticipated.

All cases are reviewed according to the following scheme: Medical Records ---> Departmental QA Subcommittees (i.e. Medical, Surgical Mortality, etc.) ---> Medical Staff Departments ---> QA Screening Committee ---> Quality Assurance Committee ---> Medical Executive Committee ---> Joint Conference Committee ---> Board of Trustees.

The review includes items such as appropriateness of admission (to hospital and special care units), timeliness and adequacy of diagnostic assessment, management, use of invasive procedures, referrals, utilization of nursing and ancillaries, and discharge planning (including assessment of stability of condition on discharge).

After review, corrective action is implemented by the appropriate department. In other cases the data is collected and trended by physician for utilization in physician profiles at the time of reappointment.

We have instituted a computerized measurement of severity of illness in critical care through use of the APACHE II system. In January 1988 we will implement a computerized severity of illness system to evaluate all patients in the hospital. Mortality review then will become even more meaningful since it will consider severity of illness.

Mortality Review as Part of Overall Quality Assurance

Saint Francis Hospitals recognize that mortality review as described above represents only one small portion of the hospitals' Quality Assurance Program. Our comprehensive approach also includes: medical record review, tissue and transfusion review, surgical case review, medical and surgical morbidity review, drug utilization review, pharmacy and therapeutics review, generic screening for adverse patient outcomes (concurrent), utilization review, review of PRO quality issues, review of patient complaints, incident report review (New York State), internal incident report review and malpractice case review (through Risk Management), and extensive review of credentials and privileges for physicians and all health care providers. In addition, every department in the hospital utilizes a departmental QA plan to monitor the quality and appropriateness of patient care rendered. The data accumulated is then trended and included in specific physician profiles that are used to judge clinical competence.

Future Release of Data

The HCFA mortality data that will be released can serve as a prototype as more comprehensive data models are developed. The American Hospital Association and other organizations, including the Joint Commission, are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. We look forward to seeing the results of those efforts, since measuring quality is a complex and difficult task, and methods that will better serve the public are needed.

October 23, 1987
PR226

ST. FRANCIS HOSPITAL
Port Washington Boulevard Roslyn, NY 11576
Telephone 516/627-6200

MEDICARE PROVIDER # 330182

October 28, 1987

Dear Mr. Roper:

The Board of Directors, Management and Medical Staff of the St. Francis Hospital, Roslyn, N.Y., acknowledge receipt of mortality information about Medicare patients treated here in 1986. Our comments follow:

1. The mortalities cited are consistent with our own data. All of the cited mortalities have been reviewed by our quality assurance system which culminates in review by the Quality Assurance Committee of the Board of Directors.

2. All of our mortality rates are within the range of predicted mortality rates as identfied in your letter of September 21, 1987.

3. Our detailed review of 13 cases reviewed at random from our total case load of 963 cases in category HL (low risk heart disease) discloses that all 13 cases more properly should have been classified in category HM (severe chronic heart disease). Our conclusion is based on the severity of the illness in question and on the extent and severity of co-morbidities.

4. The fact that the St. Francis Hospital is a referral center for cardiac patients for the Long Island, N.Y. region means that many of our patients are pre-screened with the result that we tend to have a very high incidence of severely ill cardiac patients.

The following suggestions are respectfully submitted.

1. Adjustments in the method of calculating predicted mortality should be made to allow inclusion of indices targeted to the issue of severity of illness.

Founded by the Franciscan Missionaries of Mary

2. The data when released should include identification of the type of institution (general community, specialty, tertiary referral center, teaching hospital, etc.) because that information bears on the severity of illness within the various diagnostic categories.

3. The release of mortality data should be accompanied by a statement which explicitly advises that mortality data are not by themselves an adequate index of the quality of care offered by any hospital.

Cordially,

Robert F. Vizza Ph.D
Robert F. Vizza, PH.D
President & Chief Executive Officer

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RFV/d

ST. JAMES MERCY HOSPITAL

HORNELL, NEW YORK 14843 (607) 324 - 3900

October 28, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

We have reviewed the details and the information included in your mortality report for 1986. There seems to be a duplication of patient [redacted] He is listed twice in the detail for our hospital (ID # 330151). All columns are exactly the same except for surname. The other patients information we found to be correct.

Sincerely yours,

William Connors

William Connors
Vice President

WC/sc

THE CHURCH CHARITY FOUNDATION OF LONG ISLAND

• 393 Front Street, Hempstead, NY 11550 • (516) 560-6460

WILLIAM E. McCAULEY
Executive Vice President

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 309-G
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Dr. Roper:

The Church Charity Foundation of Long Island takes pride in its 136 year history of providing health care. We care for 130,000 people each year in our hospitals, nursing homes and retirement community. The organization maintains the highest standards in staff selection, medical technology, and facilities management. The St. John's Episcopal Hospitals are pleased to see that the results of the HCFA study of hospital mortality rates for Medicare patients discharged in 1986 fell within the predicted range in all 17 of the categories examined by HCFA.

We are troubled, however, by many of the shortcomings in the HCFA methodology. Because this hospital-specific information is likely to be used by the general public to make comparisons between hospitals regarding quality of care, it is essential that the limitations of the HCFA study be understood by everyone.

1. The HCFA methodology has no history of application to the assessment of hospital performance. The clinical categories developed for the HCFA study are not congruent with categories generally in use by hospitals. The study used new and untested computer models which will be extremely difficult for hospitals, PRO's and the public to interpret.

2. We are unable at this time to tell whether the HCFA model demonstrates a "good fit" because the indicators that came from the first run have not been published. We have yet to see the definitions of the variables used and the diagnostic statistics needed to evaluate the reliability of the model's prediction.

St. John's Episcopal Hospital, Smithtown St. John's Episcopal Hospital, South Shore
St. John's Episcopal Homes for the Aged & Blind, Brooklyn, St. John's Episcopal Nursing Home
The Village of St. John, Smithtown

3. Differences in the hospital's predicted mortality rate compared with the actual mortality rate may be due to the inability of the HCFA model to predict mortality accurately. The HCFA model cannot identify and measure all patient characteristics that can affect the hospital's death rate. And, in the absence of complete measurements of factors such as severity of illness, health status, types of services offered, Emergency Room activity, transfer arrangements with nursing homes or hospices, psychological condition, or family support, any deviation from the predicted mortality rate may be due to unmeasured differences in patient condition. We cannot know the extent to which deviations are attributable to the quality of patient treatment.

4. An additional major hazard is that the methodology includes all Medicare deaths that occurred within 30 days of admission and both hospital and non-hospital care -- as well as environmental factors -- could be responsible for the death.

5. It is questionable whether teaching hospitals ought to be lumped in together with community hospitals.

The question of whether an assessment of mortality can in fact indicate underlying problems in the quality of care is still unanswered.

Sincerely,

William E. McCauley

William E. McCauley
Executive Vice President

HCFALET3

Andrus Pavilion • St. John's Riverside Hospital
967 NORTH BROADWAY • YONKERS, NEW YORK 10701 • 964-4444

October 29, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Attention: William L. Roper, M.D.
Administrator

Dear Dr. Roper:

St. John's Riverside Hospital commends HCFA in their efforts to educate the public, however, caution should be taken that the statistics are considered a quality guide in terms of comparisons of one hospital to another. So many modifiers exist that are not part of the statistical base, for example, varying patient acuity: age of patient: relationship a hospital may have with a nursing home. The benefit of these statistics, as I see it, is to give individual hospitals information about themselves that they can use to monitor their own patient care.

Thank you for this opportunity to comment.

Very truly yours,

Louis F. Parker
Executive Director

LFP/jt

ST. Joseph's
Hospital

Medicare Provider No. 330108

General Comments

The Data used by HCFA indicate that there were 1552 Medicare admissions to St. Joseph's Hospital in 1986. This data also shows that a total of 161 Medicare patients died within 30 days of admission. Of these, 145 died while still a patient at the Hospital, while 16 others died after discharge. Four patients were incorrectly listed as having died after discharge when in fact 3 patients expired in the Hospital while 1 died later at a Veteran's Hospital.

Our own records indicate that there were 2641 Medicare admissions to our facility in 1986. Presumably, the discrepancy between our figures and HCFA's reflects multiple admissions of individual beneficiaries to the same hospital and those individuals who stayed beyond 30 days. Furthermore, our own records do not correspond with HCFA's data as to the actual number of inpatient deaths within 30 days of admission.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic codes or other data used in their analysis.

It is important to note that even though our mortality rates fell within the predicted mortality rates in each category, we are nonetheless concerned regarding the release of this information to the public lest it be considered a direct measure of a hospital's performance. We at St. Joseph's already have in place multiple mechanisms for the review of all mortalities (E. R. Committee's reviews of all deaths within 24 hours of admission, various Medical Staff Departments' reviews of all deaths and C.P.R. Committee's critiques of all "Dr. Blue's"). Added to this are periodic reviews by New York State Department of Health and the Peer Review Organization. The statistical data presented by HCFA can at best do no more than identify potential areas for further evaluation. The course of one's illness is affected by a variety of circumstances, many of which have nothing to do with the patient's hospital care. For example, the following factors are not considered: the timeliness of admission; patient compliance; pre-hospital care; existence of comorbid conditions; psychological condition; social factors; individuals with terminal illnesses brought to the hospital for end stage comfort measures; individuals who specifically request no resuscitative efforts... Other deaths may result from the management of a patient in a post acute care facility such as a nursing home or may be totally unrelated to the condition of the patient under treatment at the time of discharge.

Data Analysis

Our own careful analysis of the data revealed the following information:

23 of the patients who expired were transferred in from alternate level of care facilities.

10 patients were direct transfers from other hospitals, and the majority of these patients were in the cancer and cerebrovascular accident categories. It should be noted that St. Joseph's operates a certified oncology program with respite services for Hospice patients as well as neurosurgery and an acute care certified rehabilitation program.

2 trauma patients who expired had extensive burns. St. Joseph's operates a regional burn treatment center.

25 patients died within 24 hours of admission. Half of these patients were in full cardiac or respiratory arrest upon arrival to our Emergency Care Center.

While cancer was noted as the principal diagnosis for 24 cases, an additional four cases listed in the unknown diagnostic category were in fact cancer. Eighteen other individuals listed had a cancer diagnosis as a comorbid condition.

The average age of the patients who expired was 77. Ninety-Two per cent were noted to have additional comorbid conditions.

For example, if one were to review in detail the five cases identified under the diagnostic category SE for sepsis, one would note:

Medicare Provider No. 330108

Patient #1 had a longstanding history of cardiac disease, seizures, atrial fibrillation, a prior CVA and was noted to have an element of congestive heart failure along with his sepsis on admission. Five days after admission, he became progressively unresponsive and the family requested that he not be resuscitated.

Patient #2 was an 83-year old female with a history of hypertension, gastric carcinoma and cardiac disease who also was in congestive heart failure on admission. Attempts to resuscitate her five days after admission were unsuccessful.

Patient #3 was a paraplegic secondary to metastasis from a lymphoma to the spinal cord, who died at a Veteran's Hospital nine days after discharge.

Patient #4 was a 76-year old female who also had diabetes, chronic obstructive lung disease and renal failure. Four days after admission she developed cardiac arrhythmias and probably a cerebrovascular accident as well. Attempts to resuscitate her were unsuccessful.

Patient #5 was a 56-year old male who had been in a vegetative state at home secondary to a cerebrovascular accident. He had had multiple problems with infections and gastrointestinal bleeding in the past.

In our review of these cases, death was an expected outcome in 45% of the cases based upon an assessment of the patient's condition on admission. Death was a significant possibility in 48% of the other cases.

The five categories in which the Hospital had the highest mortality rates (but well within the predicted mortality ranges), were described by HCFA as being "high risk". Some comments:

HS--Severe Acute Heart Disease--47% or 23 deaths. The average age of these patients was 76 and eight of these individuals were in full arrest upon admission. Nine patients died within 48 hours presumably secondary to the extent of their infarcts.

Medicare Provider No. 330108

CE--Cerebrovascular Accidents--36% or 17 deaths. The average age of these patients was 79 and four of them died within 48 hours of admission of massive cerebral infarcts. Seven of these individuals were from other facilities including three direct transfers from other hospitals.

GE--Gastrointestinal Catastropies--29% or six deaths. The average age was 81. Three patients died within 48 hours of admission and all had evidence of comorbid condition.

Ca--Cancer--26% or 24 deaths including two patients who died following discharge. Ten of these patients had cancers of the respiratory tract which nationally carries a high mortality rate. Two were Hospice patients and three were transfers from other hospitals.

SE--Sepsis--26% or five deaths. See detailed review above.

It should be also be noted that St. Joseph's Hospital had rather a low mortality rate for the diagnostic category of pulmonary disease which is considered a high risk category (19% mortality out of a predicted range of 13-31%). This is in spite of the fact that this was our fourth highest frequency category with 97 cases. Similarly, our mortality rate for orthopedic cases which was listed as our second highest frequency category with 136 cases was only 1%. This represents a single case of a patient who expired 13 days after discharge. We were unable to ascertain the exact cause of death of this individual.

Patients Who Expired After Discharge

Corrected HCFA data identifies 16 individuals who expired after hospital discharge, but within 30 days of a prior admission. Six of these or 38% were discharged to alternate level of care facilities while six of these or 38% had been discharged with homecare services. The average length of stay out of the hospital was nine days before death.

Conclusion

In conclusion, we reiterate the need to examine this data very carefully before making any assumptions. Discrepancies between HCFA and our own data detract credibility from the entire report. One has many questions regarding the HCFA model's ability to accurately predict mortality using an extremely complex statistical calculation. The central question, "Are differences in hospital mortality rates a reflection of patient loads or patient treatments?" remains unanswered.

Corrections:

[redacted]
Cat.: Ca Age: 075 Sex: F
Adm. 2/19/86 D/C: 2/21/86 Death: 2/26/86
Correction: Readm. 2/26/86 D/C: 2/27/86 Death: 2/27/86

[redacted]
Cat.: Ce Age: 083 Sex: F
Adm. 12/11/86 D/C: 12/24/86 Death: 12/31/86
Correction: Died 12/24/86

[redacted]
Cat.: Un Age: 081 Sex: F
Adm. 6/30/86 D/C: 7/14/86 Death: 7/22/86
Correction: Readm.: 7/14/86 D/C: 7/22/86 Death: 7/22/86 (Patient was transferred from exempt unit to acute hospital 7/14/86.)

[redacted]
Cat.: Se Age: 065 Sex: M
Adm. 5/10/86 D/C: 5/15/86 Death: 5/24/86
Correction: Patient was transferred 5/15/86 to Buffalo V.A. Hospital.

ST. Joseph's
Hospital

Medicare Provider No. 330108

Died After Discharge

Category	Patient	LOS	Death	Diagnosis	D/C Status
CE	[redacted]	3/19-3/26/86	3/27/86	CVA	To an SNF
CE	[redacted]	9/15-9/20/86	10/7/86	CVA	Home with PHN referral
GI	[redacted]	2/19-3/3/86	3/8/86	GI bleed, COPD	Home with PHN referral
GI	[redacted]	5/29-6/3/86	6/17/86	Anemia, mult. myeloma	Home with daughter
HM	[redacted]	7/20-8/13/86	8/18/86	CHF	Adult Care Home
ME	[redacted]	1/4-1/14/86	1/18/86	dehy.OBS,UTI	To an SNF
ME	[redacted]	3/20-3/31/86	4/7/86	DM,Azotemia,ASHD	To an SNF
OP	[redacted]	10/22-11/5/86	11/18/86	S/P laminectomy	Home
PN	[redacted]	8/12-8/18/86	9/7/86	COPD	Home with PHN referral
PN	[redacted]	8/12-8/21/86	8/24/86	Met.Ca of Lung; COPD	Home with Hospice
SE	[redacted]	5/10-5/15/86	5/24/86	Sepsis; lymphoma	To a VA Hospital
Un(PN)	[redacted]	1/12-2/1/86	2/11/86	Resp.Fx.;COPD leukemia	Adult Care Home
Un(CE)	[redacted]	1/1-1/18/86	1/27/86	CVA-Rehab	To daughter's home
Un	[redacted]	2/28-3/2/86	3/10/86	Seizures-old CVA	Home with OP Rehab
Ca	[redacted]	12/16-12/30/86	1/10/87	Ca of lung	Home with PHN referral
Ca	[redacted]	12/10-12/17/86	1/4/86	Ca	Home with Hospice

No single diagnostic category had > 3 deaths.
6/16 went to Alternate Level of Care facilities 38%
6/16 went home with services (4 PHN + 2 Hospice) 38%
Average 9 days after discharge before death.

St. Joseph's Hospital Health Center
301 Prospect Avenue
Syracuse, N.Y. 13203

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

This will acknowledge receipt of the 1986 Mortality Data computed by the Health Care Financing Administration for this hospital.

We note that the report indicates that this hospital's experience falls within the predicted range in each of the 16 categories. We are in agreement with the observation made in your letter of September 21, 1987 that this information, by itself, cannot be used to make judgments about quality of care in an individual hospital or to make comparisons among hospitals, since this information does not address a number of complex issues, including severity of illness.

The information which you have forwarded us is being used, together with a variety of other parameters, in the ongoing review of our patient care programs.

Sincerely,

James H Abbott

James H. Abbott
Executive Vice President

tml

ST. LUKE'S\ROOSEVELT
Hospital Center

Amsterdam Avenue at 114th Street, New York, NY 10025

The Roosevelt Hospital
St. Luke's Hospital
Woman's Hospital

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration (HCFA)
6325 Security Boulevard
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for the opportunity to provide input on the 1986 HCFA Mortality study. We have reviewed the data and wish to make the following comments:

1. With regard to the HL (low risk heart disease) category for the St. Luke's site, your report states there were 45 deaths and a 10% mortality rate. Upon review, it was determined that the Principal Diagnosis was miscoded in 8 cases. In view of the corrected coding 6 of these cases belong in the HM (severe chronic heart disease) category and 2 cases should be in the HS (severe acute heart disease) category. (see Attachment I)

   Please also note that one death reported in the HL category is not correct according to our records. The patient did not expire on the date of discharge as your report indicates. This patient was discharged alive and followed in our outpatient department.

   The following table illustrates the above corrections. We request that these corrections be incorporated into your study findings, when published.

ST. LUKE'S SITE

CATEGORY	TOTAL # PATIENTS	# DEATHS	DEATH RATE (%)	HCFA PREDICTED % RANGE DEATH RATE
* HL	488	36	7%	4 - 9%
* HM	200	40	20%	17 - 29%
* HS	93	24	26%	29 - 51%

* HL - Low Risk Heart Disease
* HM - Severe Chronic Heart Disease
* HS - Severe Acute Heart Disease

A University Hospital of
Columbia University College of Physicians & Surgeons

2. Upon review of our deaths in specific categories we noted that a large number of the mortalities occurred in patients over 80 or 90 years of age. For example, at the Roosevelt site in the HL (low risk heart disease) category 75% (6 of 8) of the deaths were patients who were 90 or more years old and 100% (8 of 8) of the deaths were patients who were 80 or more years old.

3. We also wish to advise you that 20 of our deaths were incorrectly listed as post discharge deaths (see Attachement 2A & 2B). Our records indicate that 15 deaths at the Roosevelt site and 5 deaths at the St. Luke's site occurred during the hospital stay not after discharge. A list will be supplied to you upon request.

St. Luke's-Roosevelt Hospital Center delivers high quality care to the population it serves. The 1986 mortality data (see Item #1 above) indicate that our institution is within the acceptable predicted mortality range for the 16 diagnostic categories selected. However, we do have several concerns about the study design implemented by HCFA. The variables of race and socio-economic status and adjustments for severity of illness were not included in this model. All these factors play an important role in the review of mortalities, particularly in a institution like ours which serves a significant number of high risk patients and patients in minority and lower socio-economic groups. It is our opinion that if these factors were taken into account our adjusted mortality rate would be even lower than reported.

Again, thank you for the opportunity to provide comments. Please contact me if you have any questions regarding our response.

Sincerely

Edmund O. Rothschild, M.D.
Vice President,
Professional & Academic Affairs

Attachments
EOR/s

Attachment 1

HCFA MORTALITY STUDY

ADJUSTMENT OF DIAGNOSTIC CATEGORIES FOR HEART DISEASE

ST. LUKE'S SITE

After coding valiadation review it was determined that seven (7) cases had incorrect principal diagnosis codes. Principal diagnostic code and category changes are listed below.

HIC#	HCFA CATEGORY	HCFA PRINCIPAL DIAGNOSIS	SL CORRECTED PRINCIPAL DIAGNOSIS	CORRECTED CATEGORY
[redacted]	HL	427.89	428.0	HM
[redacted]	HL	424.1	428.0	HM
[redacted]	HL	414.0	428.0	HM
[redacted]	HL	423.2	428.0	HM
[redacted]	HL	414.0	428.0	HM
[redacted]	HL	414.0	428.0	HM
[redacted]	HL	414.0	410.0	HS

There was also a Principal Diagnosis transcription error in one case which resulted in a category change.

HIC#	HCFA CATEGORY	HCFA PRINCIPAL DIAGNOSIS	SL CORRECTED PRINCIPAL DIAGNOSIS	CORRECTED CATEGORY
[redacted]	HL	414.8	410.4	HS

The patient listed below was discharged but did not expire on the date of discharge.

#HIC	HCFA CATEGORY	ADMISSION DATE	DISCHARGE DATE
[redacted]	HL	11/7/87	11/14/87

Attachment 2A

HCFA MORTALITY STUDY

POST DISCHARGE DEATHS ADJUSTED BY ST. LUKE'S-ROOSEVELT HOSPITAL CENTER

ST. LUKE'S SITE

CATEGORY	TOTAL NO. OF DEATHS	HCFA/NO. OF DEATHS AFTER DISCHARGE	SLRHC ADJUSTED/ NO. OF DEATHS AFTER DISCHARGE	NO. OF ERRORS
CA	76	15	15	0
CE	23	6	5	1
EY	1	0	0	0
GC	17	3	3	0
GI	12	0	0	0
GU	4	3	3	0
GY	1	0	0	0
HL	44	5	4	1
HM	34	4	2	2
HS	22	2	2	0
ME	16	2	2	0
OP	1	0	0	0
PN	44	9	9	0
RN	7	2	2	0
SE	14	2	2	0
TR	11	5	4	1
UN	41	10	10	0
TOTALS	369	68	63	5

Attachment 2B

HCFA MORTALITY STUDY

POST DISCHARGE DEATHS - ADJUSTED BY ST. LUKE'S-ROOSEVELT HOSPITAL CENTER

ROOSEVELT SITE

CATEGORY	TOTAL NO. OF DEATHS	HCFA/NO. OF DEATHS AFTER DISCHARGE	SLRHC ADJUSTED/ NO. OF DEATHS AFTER DISCHARGE	NO. OF ERRORS
CA	54	11	9	2
CE	21	0	0	0
GC	6	1	0	1
GI	12	2	0	2
GU	4	1	0	1
HL	8	1	1	0
HM	23	1	0	1
HS	29	2	0	2
ME	14	1	1	0
PN	34	8	4	4
RN	3	1	0	1
SE	3	1	0	1
TR	3	0	0	0
UK	33	8	8	0
TOTAL	267	38	23	15

ST LUKE'S
MEMORIAL
HOSPITAL
CENTER

Post Office Box 479, Utica, New York 13503 315-798-6000

Medicare Provider #330044

October 20, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

We have reviewed the mortality data scheduled to be released by HCFA in December 1987. Thirty-one corrections regarding dates of admission, discharge and expiration are enclosed and submitted for recalculation. Although our facility's actual mortality rates fall within the predicted ranges in all diagnostic categories analyzed, we would like to take this opportunity to express our concern regarding the release of this information in a meaningful context. As with any statistical compilation and/or comparison, misinterpretation and public apprehension are possibilities. The Administration of St. Luke's-Memorial Hospital Center feels it would be a disservice to the community it serves to release such information without clarification.

In developing these statistics HCFA's principal intention was for hospitals to use this data to identify areas for review and thus enhance hospital quality assurance programs already in existence. The rendering and monitoring of quality care is of utmost importance to the Board of Trustees, Administration, Medical Staff and employees of St. Luke's-Memorial Hospital Center. The Quality Assurance Committee of the hospital monitors all indicators of quality of care rendered including, but not limited to, mortality and develops corrective action when and if problems or potential quality issues become apparent. Organizations such as the American Hospital Association and the Joint Commission on Accreditation of Hospitals are currently involved in investigating methods of measuring quality that do not rely solely on mortality rates.

Our concern is that the implied suggestion of this statistical analysis appears to be that mortality rates are a direct measure of the quality of care rendered and thus hospital performance. The community as consumers of health care have a legitimate interest in and right to valid and useful information. We are hopeful that our comments regarding this analysis will assist those concerned to place this information into proper perspective.

In considering this data, the reader must be aware that the population studied included Medicare patients only. Also of interest is that the data reflects deaths that occurred 30 days post-admission. Obviously, the inclusion of this time frame inflates mortality rates. The model used to develop these statistics did not take

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

into consideration the severity of illness at the time of admission. Also not considered was whether the patient was transferred from a skilled nursing facility, whether the patient had a terminal illness or illnesses present at the time of admission that may have complicated the patient outcome. Worthy of note is that the average age of patients who expired during hospitalization at St. Luke's-Memorial Hospital Center or 30 days post-admission was 78.7 years. Life expectancy for males is 71.2 years and for females is 78.2 years (U.S. Department of Commerce, Bureau of the Census, 1987 Edition).

Another issue that must be considered when reviewing the data is that each facility provides unique services that attract certain patient populations. In reviewing or comparing this information, the health care consumer must consider the services rendered by each facility. For example, St. Luke's-Memorial Hosptial Center has the only renal dialysis unit in the city, the largest intensive care unit, and has an oncology unit. With this in mind, it becomes apparent that we provide services to the chronically, acutely and terminally ill Medicare population in the area. This is reflected in our data.

In summary, the public must be aware that mortality data cannot be used to measure the quality of care rendered by a facility. Mortality review is only one of several factors considered in comprehensive quality control monitoring. The existence of quality problems are determined by each facility through indepth analysis of individual medical records. Comparing results with a national average is not the answer since each facility and the patients it treats are not "average". Negative outcomes can result even when there are not deficiencies in complying with the accepted standard of care.

Again, although we are pleased that our data falls within the predicted ranges, both in overall mortality rate and also in each individual diagnostic category, we are concerned that the data does not portray the actual experience of the hospital. For reasons stated throughout this discussion, we feel that the published data overstates true mortality because of the manner data was collected and reported.

Sincerely,

Andrew E. Peterson
Executive Director

cc: HANYS
CNYHA

St. Mary's
Health Care
Services

89 Genesee Street
Rochester, New York 14611
(716) 464-3000

Daughters of Charity
National Health
System, Inc

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
300 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper:

I appreciate this opportunity to comment on the Health Care Financing Administration's (HCFA) mortality data for St. Mary's Hospital which will be made public in December. I believe this information will be useful to the hospital in identifying areas for reveiw and analysis as part of our ongoing quality assurance activities. The value of this information for consumers as a measure of quality is a more complicated issue and is one which I and members of our staff will be addressing over the next month.

I would like to comment briefly on several points regarding the measurement of quality in our hospital, the environmental factors which affect our patients, and on the process for reviewing the HCFA data within St. Mary's Hospital.

Quality Assurance Activities At St. Mary's

St Mary's Hospital has an active quality assurance program which involves monitoring and evaluating patient care in order to identify ways to improve the quality of care. This program includes measuring all patient related activities against a set of standards and taking action to correct and improve any areas which we discover do not meet these standards. Our quality assurance program involves staff in all areas of the hospital (patient floors, laboratory, radiology, housekeeping, etc.) and requires reporting of any problems or concerns to the hospital's Board and administration.

A key part of our quality assurance program is a review by physicians of all deaths occuring at the hospital. However, we consider this only a part of our patient care evaluation process which involves monitoring of patient falls, medications, blood use, infections and a variety of other items. It is only through these combined activities that we can begin to assess how we are caring for our patients.

Quality Assurance Activities At St. Mary's (Cont.)

Clearly, the measurement of quality has become the key issue for all hospitals. St. Mary's has been fortunate to be involved with a community-wide consortium of hospitals in Rochester which has devoted considerable effort to supporting quality assurance activities. Currently, St. Mary's is involved in a community research project to assess quality of care throughout the member hospitals. In addition, we have joined with several other hospitals to put in place a new system to define and measure quality of care and to provide a better assessment of how severely ill our patients are.

Unique Services Of St. Mary's Hospital

St. Mary's is a teaching hospital of the University of Rochester School of Medicine and Dentistry and, as such, maintains a large faculty of sub-specialists in medicine, surgery, and ophthalmology. An important part of our teaching program is clinical research where patients with difficult or complicated problems are placed on specific treatment programs. One area where we have many of these clinical research activities is in our medical oncology unit where our physicians are involved in nation-wide studies to treat different types of cancer with new drugs or combinations of therapies. The hospital is very supportive of these activities because we believe they will yield more successful treatment for cancer and related diseases. St. Mary's also has an active acute renal dialysis program which treats a large number of elderly kidney patients with a variety of complicated conditions.

Over the past several years, St. Mary's, like most hospitals, has seen a increase in the number of elderly patients. Our hospital, in particular, cares for a large number of elderly persons because of the neighborhood in which we are located. Our service area comprises a large area of the City of Rochester from which many of the younger families have moved, leaving behind an increasing older population. In 1986, when the HCFA data was collected, St. Mary's served a higher percentage of persons age 85 and older then any other hospital in Rochester. These patients, as you know, are at greatest risk for complicating illnesses and death.

St. Mary's Service Area

As a Daughter of Charity Hospital, it has been St. Mary's special mission to provide high quality care to the poor and neglected of the community. St. Mary's service area includes a large number of poor, elderly, and of minorities. Studies by local planning agencies

St. Mary's Service Area (Cont.)

have shown that the area around St. Mary's is medically indigent and lacks appropriate primary care services. St. Mary's is responding to this lack of services by developing outreach prevention and treatment clinics along with other health care providers in the area. However, we continue to observe that the lack of appropriate primary care (physician) services has affected the general health of residents in this area. We are seeing patients admitted to the hospital who are sicker and we continue to see an increase in the number of serverly ill patients through our Emergency Center. A major agenda for St. Mary's continues to be the improvement of the quality of life for the residents of our service area since we are well aware that quality of care should not end at the doors of the hospital.

Process For Reviewing HCFA Mortality Data

The medical staff, Board and administration of St. Mary's have reviewed the mortality data from HCFA and are pleased with the results shown. In all of the 16 categories, our results are well within the "predicted range of mortality rates." In evaluating the deaths which occurred after discharge, we have determined that a majority of those patients were either terminally ill or were returned to nursing homes for custodial or comfort care.

While I am pleased with St. Mary's performance in the HCFA analysis, I have continued to reinforce with our staff and board, that this is not the only measure of hospital performance. I intend to use this data as the basis for an intense review to improve our response to quality issues. Our Medical Director and Quality Assurance Staff are reviewing the HCFA data now and will have more documentation available within one month.

I am attaching a detailed analysis of our data which provides some data on our medicare admissions as well as comment on the out-of-hospital deaths (see Attachment A).

Again, I appreciate this chance to discuss St. Mary's data. We continue to work with our medical and support staff as well as with community, state and federal agencies to develop better ways to measure the quality of care which we deliver to patients.

Sincerely,

Patrick Madden

Patrick J. Madden
President

PJM-8:jlh
Attachment

ATTACHMENT A

ST. MARY'S HOSPITAL
HCFA MORTALITY DATA

Data Verification

The data used by HCFA indicate that a total of 213 Medicare patients admitted to St. Mary's hospital died within 30 days of admission. Of these, 175 died while still a patient of the hospital, while 38 died after discharge. Our own records indicate that 2,727 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals or several admissions to St. Mary's. We have no way of verifying whether the number of Medicare patients treated at St. Mary's hospital is correct. It is also impossible to determine the percentage of the 38 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record. We have done a chart review of all the out-of-hospital deaths and, to date, 29 of those patients were discharged with a terminal prognosis or returned to custodial or comfort care. We are continuing to research the remaining nine cases with the attending physicians.

Interpretative Comments

In addition to verifying the HCFA information and performing chart reviews on individual cases, St. Mary's staff have analyzed the individual data to determine whether any of the co-morbid or complicating conditions identified in the HCFA methodolgy were present in any of these cases. The following summarizes the review of the data:

Diagnostic Category	# Deaths	% of Deaths With Co-Morbid or Complicating Conditions*
HIGH RISK		
Cancer (CA)	28	39%
Cerebrovascular Accidents (CE)	14	79%
Severe Acute Heart Disease (HS)	34	15%
Severe Chronic Heart Disease (HM)	20	45%
Gastrointestinal Catastrophies (GC)	9	33%
Metabolic Disorders (ME)	6	33%
Pulmonary Disease (PN)	38	45%
Reval Disease (RN)	8	50%
Sepsis (SE)	1	100%
Trauma (TR)	1	0
LOW RISK		
Ophthalmogic Disease (EY)	0	-
Gynecologic Disease (GY)	1	0
Low-risk Heart Disease (HL)	8	38%
Gastrointestinal Disease (GI)	7	29%
Urologic Disease (GU)	10	40%
Orthopedic Disorders (OP)	0	-

*Defined in HCFA data by ICD9 codes. A co-morbid or complicating condition is determined by the presence of one of these ICD9 codes as a secondary diagnosis.

ST. PETER'S HOSPITAL

315 SOUTH MANNING BLVD.
ALBANY, NEW YORK 12208
TELEPHONE 518 / 454-1550

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Administrator:

We are requesting that the following comments be included as part of the HCFA Mortality Data for St. Peter's Hospital (Provider #330057). It is our understanding that this information will be part of the December publication in the Federal Register and the release of information to any interested parties.

COMMENTS:

1. Twenty-four SPH Hospice deaths were included in the St. Peter's Hospital mortality data.
2. The data contained two pairs of duplicate patients ID numbers (HIC) with different surnames. One name in each pair was unidentifiable. The numbers were [redacted] and [redacted]. This information suggests a double count of the mortality cases.
3. In addition to the two patients unidentified in #2, one patient [redacted] could not be found in our data system. The date of death was the same day as the date of admission.
4. Three patients had a date of death that was before the date of discharge. These deaths occurred around midnight of the date of death.

Finally, we would like to comment on the data and the quality of care provided to our patients. The HCFA mortality data for St. Peter's Hospital were consistently within the range of the expected mortalities for all of the disease categories. Despite this "favorable" outcome for our hospital, it is important to emphasize that such a study should not be looked on as a measure of the quality of care provided to hospital patients. Factors such as severity of illness, patient's health status, psychological condition and family support are not taken into account in the HCFA report.

The use of the data should be restricted to the review activities of Medicare and the Peer Review Organizations. It is unfortunate that the importance and meaningfulness of this information to consumers has been exaggerated by certain political groups. As a hospital with favorable mortality statistics, we concur with the American Hospital Association's opposition to the use of this information as a quality of care indicator or consumer selection criterion.

Sincerely,

Mark L. Lane

Mark L. Lane
Executive Vice President

MLL:gjv

cc: Sister Ellen Lawlor, President
Robert H. Randles, M.D., V.P., Medical Affairs
Albert A. Apicelli, M.D., Chairman, Quality Assurance Committee
Victor Ross, V.P., Clinical & Professional Services

St. Vincent's medical center of Richmond
A Sisters of Charity Health Care System Corporation

COMMENTS ON THE HCFA MORTALITY DATA

St. Vincent's Medical Center of Richmond
Staten Island, New York

Medicare Provider Number 330028

Interpretive Remarks

The actual mortality rates listed for St. Vincent's Medical Center were within the range of predicted mortality rates in all categories cited.

However, we concur with the American Hospital Association, Hospital Association of New York State and Greater New York Hospital Association that mortality rates, in and of themselves, are not the most effective quality care indicators and at St. Vincent's are among a number of factors monitored as part of our facility's institution-wide quality assurance activities.

Moreover, the statistical model used in computing this data does not take into consideration the severity of a patient's illness, co-morbidities, socio-economic status or environmental factors following discharge totally unrelated to the care delivered that would influence the number of deaths reported. Tertiary facilities by their nature, treat a greater number of more critically ill patients, and St. Vincent's is among those facilities falling into this classification in its role as a Cancer Care Center and Cardiac Center; yet the impact that serving as a tertiary facility could have on a facility's mortality statistics is not accounted for in the HCFA model.

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State University of New York
Health Science Center
Syracuse

University Hospital

Office of the Administrator
(315) 473-4240

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper: RE: Provider #330241

This will acknowledge your letter of September 21, 1987, relative to selected mortality information about State University of New York University Health Science Center, University Hospital Medicare patients treated in 1986.

We found the data interesting and are reassured that we fell between the norms for predicted mortality rates. We take pride in our continued delivery of quality services which is of the utmost importance to the University Hospital and our Medical Staff. The review, monitoring and analyses of information of this nature is a critical component of our ongoing Quality Assurance Program.

Furthermore, while we applaud the intent of providing consumers with useful and reliable information on the quality of care, we believe the data presented here can be misleading.

In the case of University Hospital, we would like to point out our role as a regional referral center to which a disproportionate share of the most severely ill patients are likely to be admitted or transferred.

As an example, our cancer mortality data is directly related to the fact that we are a regional cancer center.

Please note that we are in agreement with the American Hospital Association's stance that mortality data is not a measure of quality for our institution or any other hospital and I would hope that your public release of this information would include this disclaimer.

A Center for Professional Education, Patient Care and Research.

College of Medicine College of Graduate Studies College of Health Related Professions College of Nursing University Hospital

750 East Adams Street, Syracuse, N.Y. 13210

In closing, our hospital has a solid record and reputation for the provision of quality care and we welcome further refinement of this data.

Thank you for the opportunity to comment.

Sincerely,

James L

James L. Rosenberg
Chief Executive Officer

JLR/lfd

THE
STATEN ISLAND
HOSPITAL

475 Seaview Avenue, Staten Island, New York 10305
(718) 390-9525
Barry T. Zeman, President

Medicare Provider No. 33-0160

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The Staten Island Hospital, which takes pride in its 126-year tradition of quality care, welcomes the opportunity to formally respond to the U.S. Health Care Financing Administration's nationwide study of mortality rates for Medicare patients who died within 30 days of their last 1986 hospital admission.

While we are most pleased with our overall high standing, The Staten Island Hospital's review of HCFA's methodology and our in-depth analysis of hospital-specific data prompts a two-part response.

We direct our comments first to HCFA's methodology.

- HCFA, by its own acknowledgment, failed to include severity of patient illness or individual hospital case mix in the statistical model--two components that are vital to any model attempting to measure a range of predicted mortality rates.

- From the limited statistical information available to hospitals at this time, it appears that the study's untested computer model allows for a high degree of chance variation, suggesting that a hospital could fall within or outside of range purely by statistical chance.

- HCFA captured information on the deaths of Medicare recipients from Social Security, thus using data unfamiliar to hospitals.

- At no time did HCFA review a single patient's chart, thus there is little real correlation between quality of care and cause of death.

A Division of Community Health System of Staten Island, Inc.

- In 1986, no hospice care was available on Staten Island which necessitated end-stage hospital admission in 209 cases. Such admissions are in keeping with local tradition. Staten Island oncology patients prefer hospitalization to home-care during terminal illness.

  The Staten Island Hospital's Oncology Director is known community-wide for his care of terminal cancer patients, thus The Hospital attracts a disproportionate number of such patients in its case mix.

  Review of the charts indicates that the cause of death for 3 patients can be attributed to causes other than cancer (which was the admitting diagnosis)- In view of this, we request a recomputation of the data, or at a minimum, a note of clarification.

It is unfortunate that HCFA chose to build its model on data limited to the last 30 days of life and that the data is not adjusted for severity of illness or case mix. The statistical model employed by HCFA skewed The Staten Island Hospital's data in this category. In addition, the HCFA's model, unlike the Cancer Society's model, did not statistically allow for "staging", an accepted methodology in measuring oncologic mortality. It is also respectfully suggested that in cancer patients, survival rate may be the more meaningful measurement.

The Staten Island Hospital wishes to note that outstanding clinicians, high quality programs and the full range of services are available for the primary and ongoing care of cancer patients. In the final analysis, however, when presented with large numbers of terminal cancer patients, there is little to be done therapeutically except to provide the highest possible degree of comfort and caring.

Our extensive review and analysis assures us and the community we serve that there is neither a systematic nor individual quality assurance issue in The Staten Island Hospital's care of cancer patients. A recent on-site survey undertaken by the New York State Office of Health Systems Management which included chart and quality assurance review attests to this.

Sincerely yours,

Barry T. Zeman
President

Second, with regard to the hospital-specific data: The Staten Island Hospital, as a 451-bed university-affiliated community teaching hospital, maintains a firm commitment to quality in the care it annually provides to patients in over 16,000 admissions. Quality care is not only our mission and driving strategy, it is inextricably linked to strict standards of quality assurance which are outlined in a formal protocol and subject to constant and ongoing peer review.

It is this commitment to quality care that engendered an extensive and in-depth analysis of one of the 17 areas examined by HCFA. The HCFA study indicated that in 1986 cancer deaths among Medicare patients treated at The Staten Island Hospital, The Hospital was within 2% of the predicted mortality range. The study placed the actual deathrate in this category at 39% for The Staten Island Hospital compared to a predicted average which ranged from 21 to 37%.

Extensive review of care rendered and individual medical charts by The Hospital's Board Certified Director of Oncology and analysis by the Quality Assurance Committee concluded the following:

- Over 90% of the Medicare cancer patients who died in 1986 within 30 days of their last hospital admission were in the terminal stage of the disease at time of admission and were receiving end-stage palliative care. Review of the charts disclosed that in 30% of the cases, patients and families had requested no resuscitative supportive intervention (DNR).

- Over 25% of the cancer patients admitted were admitted to The Staten Island Hospital for the first time for terminal stage palliative care and died here. They had been referred to their community hospital after primary treatment was previously rendered at Manhattan hospitals. Thus, The Staten Island Hospital upheld its commitment to provide humane and pain-free care to cancer patients in the final stage of the illness.

- 25% suffered from end-stage non-oat cell carcinoma of the lung for which there is no curative therapy.

- 20% were in the final stage of metastatic neoplastic gastrointestinal disease for which there also is no curative therapy.

- Only 16 of the (209) patients admitted were below 70 years of age.

OFFICE OF THE EXECUTIVE DIRECTOR
UNIVERSITY HOSPITAL OF BROOKLYN

October 27, 1987

William L. Roper, M.D.,
Administrator
HCFA
Health Standards Quality Bureau
Hospital Mortality and Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

The following response to the sepsis segment of the HCFA Mortality Review Report was put together based on a combination of information found in Medical Records, Utilization Review/ Quality Assurance records and Infection Control records.

Our review of the five patient deaths whose principal diagnosis was listed by HCFA as sepsis revealed that only one of the deaths was attributed to hospital acquired sepsis, while 3 of the 5 patients were admitted with sepsis. Patient #5 died of causes which were unrelated to sepsis. All 5 patients were admitted as emergencies.

a. Patient #1 MR# [redacted] was a 72 year old man whose primary diagnosis was multiple myeloma. He was the only patient whose sepsis death was nosocomial. This patient was severely neutropenic when he became septic.

b. Patient #2 MR# [redacted] was a 72 year old man admitted with end-stage multiple myeloma, septicemia and empyema. Given the stage of his illness and his condition on admission, this death was not unexpected.

c. Patient #3 MR# [redacted] was a 72 year old man admitted as an emergency with congestive heart failure. Blood cultures drawn only hours after his admission showed Staphylococcal sepsis. He sustained a cardiac arrest during the hospitalization and expired 3 days after admission.

STATE UNIVERSITY OF NEW YORK HEALTH SCIENCE CENTER AT BROOKLYN
445 LENOX ROAD, BOX 23, BROOKLYN, NY 11203-2098 • (718) 270-2401

d. Patient #4 MR# [redacted] was admitted with fever of 103°F and Staph aureus sepsis. He also had bilateral infiltrates and septic emboli. He was an IV drug abuser and the following conditions were being ruled out at the time of his death: Pneumocystis pneumonia, Nocardia, aspiration pneumonia and HIV infection. He died six days after his admission.

e. Patient #5 MR# [redacted] had a craniotomy to remove a brain tumor. While this patient did have a nosocomial bacteremia during the hospitalization, that event occured one month prior to his expiration. His death appears unrelated to sepsis. Furthermore the principle diagnosis coded on the medical record is 225.0 for meningioma not 038 for sepsis.

In summary all five deaths occurred in seriously ill patients. Four of the five could be attributed to sepsis. Of the four attributed to sepsis three were septic at the time of admission. We believe these deaths were unavoidable and unrelated to the quality of care at University Hospital. Finally, since case #5 was not classified as sepsis, our corrected death rate for sepsis is 80% which according to your figures is within the range of predicted mortality rates for the diagnosis.

Sincerely yours,

Paul Rosenfeld,
Acting Executive Director

PR:dn

cc: Donald Scherl, M.D.
Peter B. French

Geneva General Hospital
Taylor-Brown Memorial Hospital

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

PROVIDER #: 330110.

Dear Doctor Roper:

In our attempt to corroborate the analysis of the mortality data at Taylor-Brown Memorial Hospital, we were unable to duplicate the figures provided. Our patient information is recorded on the basis of discharges not admissions; however, this difference does not completely explain the discrepancies in the numbers found.

Your figures show 258 admissions for 1986; our data indicates 463 patients for the same time period. Your figures show 28 deaths; 4 of these dying outside of the hospital. Our data indicates 39 inhouse deaths; when including outside deaths, we totaled 43.

HCFA demonstrated an overall mortality rate of 11%; based on our figures, we found only a 9% overall mortality rate.

We are at a loss to explain these variances and have provided a detail of the variances in mortality rates by diagnostic category (Attached).

We recognize that mortality rates are not the only indicator for quality and concur with your statement that "the information on its own is not a complete measure of the quality of care at an individual hospital". We also concur that hospital mortality rate information is useful. In fact, we use mortality rates internally as an indicator of potential quality problem areas and review all deaths to determine the reason and to monitor our quality of care.

Very truly yours,

James J. Dooley
President & C.E.O.

JJD/mkz

196 North Street • Geneva, N.Y. 14456 • (315) 789-4222

TAYLOR-BROWN MEMORIAL HOSPITAL

Provider #330110

Diagnostic Classification	HCFA Mortality Rate	Correct Mortality Rate	HCFA Range of Predicted Mortality Rates
CA - Cancer	50%	35%	9 to 58%
CE - Cerebrovascular accidents	22%	21%	9 to 64%
GC - Gastrointestinal catastrophes	0%	14%	1 to 81%
GI - Gastrointestinal disease	3%	4%	1 to 22%
GU - Urologic disease	0%	6%	2 to 51%
GY - Gynecologic disease	0%	0%	0 to 100%
HL - Low-risk heart disease	7%	12%	1 to 37%
HM - Severe chronic heart disease	11%	8%	9 to 47%
HS - Severe acute heart disease	60%	25%	10 to 80%
ME - Metabolic/electrolyte disturbances	10%	6%	4 to 54%
OP - Orthopedic disorders	11%	6%	0 to 86%
PN - Pulmonary disease	23%	15%	11 to 44%
RN - Renal disease	0%	0%	1 to 71%
SE - Sepsis	29%	25%	8 to 69%
TR - Severe trauma	0%	0%	0 to 92%

THE MARY IMOGENE
BASSETT HOSPITAL

ONE ATWELL ROAD
COOPERSTOWN, NEW YORK 13326-1394

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
200 Independence Ave., S.W.
Washington, D.C. 20201

Medicare Provider No.: 330136

Dear Dr. Roper:

As President and Chief Executive Officer of The Mary Imogene Bassett Hospital in Cooperstown, New York, I would like to take this opportunity to formally respond to The Mary Imogene Bassett Hospital mortality data that was prepared by the Health Care Financing Administration and recently released to us.

We have reviewed the data and have had some difficulty in validating the HCFA generated data with information generated from hospital records. Some specific examples are cited below:

1. In the case of one reported death we have no record of this patient ever having been admitted to our hospital. This patient has the identical HIC number of another patient who was reported dead.

2. In two cases patients were admitted to this hospital after the admission that HCFA reported as being their last 1986 admission prior to death.

3. In one case the patient's principal diagnosis appears to have been incorrectly identified.

4. In two cases the reported date of death was incorrect.

It is impossible for hospitals to validate HCFA provided information concerning the number of patients treated that fall into specific diagnostic groupings. This information can only be provided by HCFA, because it requires access to hospital billing information from hospitals throughout the United States. The accuracy of this information is vital to correctly reporting mortality percentages.

The Health Care Financing Administration has made an attempt to use a methodology that takes into consideration complicating diseases, prior hospitalizations, and casemix information. The methodology does not take into account the following factors that I feel are relevant to cases at The Mary Imogene Bassett Hospital.

1. The methodology does not fully account for severity of illness with the groupings that are presented. The grouping of patients into DRG's accomplishes the assignment of a casemix index. This index will predict resource utilization, but does not take into consideration severity of illness factors. Severity of illness can directly affect the probability of death. The Mary Imogene Bassett Hospital is a teaching hospital and a rural referral center. Hospitals such as ours receive transfer patients from other hospitals, as well as direct referrals from physicians. Many of these patients are referred here because the severity of their illness demands referral to a facility that has more sophisticated treatment capabilities. The referrals are appropriate medical decisions, but they can inflate the mortality rate in the receiving hospital.

2. In some areas of the country the options open to terminally ill patients are greater than in other areas. Terminally ill patients can receive palliative care at some nursing homes or through HOSPICE care. In this area of Central New York State, we have no strong program for caring for terminally ill patients. The hospital is the only facility capable of providing the care necessary to ease the patient's suffering. This could cause a hospital's mortality rate to be higher than other hospitals located near facilities that specialize in terminal care.

The accurate assessment of a hospital's performance is dependent on many variables. The Mary Imogene Bassett Hospital has a strong commitment to high quality medical care. Mortality data is only one of many factors that is consistently being monitored through an aggressive physician directed quality assurance program.

Sincerely,

William F. Streck

William F. Streck, M.D.
President and Chief Executive Officer

WFS:li/d4b

TIOGA GENERAL HOSPITAL   TIOGA NURSING HOME

37 NORTH CHEMUNG STREET • PHONE (607) 565-2861 • WAVERLY, NEW YORK 14892

October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sir:

The data for Tioga General Hospital [redacted] indicates an error in the report as the date of death is listed as the day prior to discharge.

The level of confidence that can be placed in the HCFA Mortality Data must be questioned given that the model does not consider all factors that influence the risk of death. Significant deviations from the predicted mortality rate could be the result of either differences in the types of patients admitted to the hospital or the differences in patient treatment. The HCFA model fails to consider a wide range of factors that have a significant impact on mortality: such factors as patients general health status, the stage of patients illness, and the attribution of factors unrelated to the condition of the patient at the time of discharge but occurring within the 30 day post-admission period.

The data will identify or suggest areas that might warrant further review. The mortality data, however, will not identify areas in which a hospital provides high or low quality care or measure hospital performance.

Appropriate assessment of hospital performance is dependent upon many variables and requires a review of quality indicators of which mortality is but one. Significant quality judgments can only be made after reviewing the information contained in a patient's medical record. Therefore, use of HCFA mortality data as a means of comparing a hospital's ability to deliver quality care is questionable.

Sincerely,

Frederick A. Kauffman

Frederick A. Kauffman
President

FAK/pn

Tompkins Community Hospital

OFFICE OF THE ADMINISTRATOR
Bonnie H. Howell

MEMORANDUM

TO: HEALTH CARE FINANCING ADMINISTRATION

FROM: BONNIE HOWELL, HOSPITAL ADMINISTRATOR
TOMPKINS COMMUNITY HOSPITAL
MEDICARE PROVIDER NUMBER 33-0307

DATE: OCTOBER 26, 1987

RE: COMMENTS REGARDING MEDICARE MORTALITY DATA

As with hospitals nationwide, Tompkins Community Hospital has been asked to review and respond to the Health Care Financing Administration's hospital specific mortality data. This is data that was compiled by HCFA about Medicare patients who were hospitalized in 1986. According to HCFA, their statistics show the number of Medicare patients admitted to each hospital, the actual percent of those patients who died within 30 days of their last admission in 1986, and a predicted range of the percent of patients who would have been expected to die given adjustments for patient mix. Patient mix refers to the types and severity of illnesses treated at each hospital.

For purposes of analyzing their mortality statistics, HCFA categorized causes of death in 17 different diagnostic groupings. Some of these diagnostic groupings include high risk illnesses such as cancer, stroke and severe chronic heart disease. Other groupings are considered low risk, such as urologic disease or ophthalmologic disease.

Tompkins Community Hospital falls within HCFA's range of predicted mortality rates for all 17 of their diagnostic categories. This means that, according to their statistics, our hospital's Medicare mortality rate is exactly where it should be given our patient mix. In fact, in over half of the diagnostic categories, Tompkins Community Hospital is below the median of the predicted range.

However, we caution against using the HCFA information to draw conclusions about the quality of care provided in any hospital for several important reasons.

First, experienced statisticians studying the HCFA methodology for calculating expected mortality ranges have been unable to simulate the HCFA model. This means that HCFA data can be neither duplicated nor verified. Second, the deaths attributed to hospitals include all Medicare recipient deaths that fall within thirty days of the last hospital admission for each of those patients. In many cases, these patients died after they left the hospital. Hospitals do not have access to the information HCFA used to establish their causes of death. Just under 20% of the Medicare deaths attributed to Tompkins Community Hospital occurred after discharge. We have no way of verifying whether these deaths were related to the conditions for which the patients were hospitalized. Third, in a random sampling of thirteen Medicare patient charts, our Quality Assurance Department found three errors in HCFA's data of dates of death. Three errors in thirteen charts is a high percentage and casts serious doubt on the overall accuracy of the data HCFA compiled.

In summary, it is our strong recommendation that conclusions regarding quality of care not be drawn from this mortality data. The course of every illness is effected by many factors outside of the hospital's control, including but not limited to the patient's general health, their own adherance to physician prescribed treatment, and the timeliness of diagnosis and hospitalization. Moreoever, sole provider community hospitals like ours serve as end stage health care facilities. Patients with chronic degenerative conditions are admitted to these hospitals shortly before they die. It is a fact that simply cannot be overlooked, yet nowhere is this or other pertinent information sufficiently addressed to ensure the public's understanding and therefore its appropriate interpretation of HCFA's mortality data.

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October 26, 1987

DANIEL S. FRUCHTER
Vice President/Administrator

William L. Roper M.D.
Administrator
Department of Health & Human Services
H.C.F.A.
Washington, D.C. 20201

Response to HCFA Mortality Study

Dear Dr. Roper:

Union Hospital would like to thank HCFA for giving us a preview on the findings of their mortality study prior to public release.

Union Hospital places great value on the quality of care it provides. Quality of care is of the utmost concern to the Board of Trustees, Management and Medical staff. Any indication of potential quality problems including a mortality rate that is higher or lower than predicted leads to an investigation to determine if a problem in fact exists, at which time appropriate corrective actions are taken.

Union Hospital uses Peer Review, screening criteria, concurrent and retrospective indepth chart reviews, also standards as designated by the Joint Commission and the New York State Department of Health in the identification of quality care.

Approximately 30% of our admissions are high risk patients. These patients are quite elderly, residents of nursing homes and have chronic illnesses. A.H.A. and other organizations including the Joint Commission are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. Union Hospital is looking forward to the results of those efforts. Union Hospital also believes better measures for the public are needed. The existence of quality problems can only be determined by an indepth review of medical records regardless of how rates of adverse occurrences compare with national average.

Findings from such review are used by the Department of Quality Assurance to improve and maintain the quality of care now being rendered.

This ongoing review is a factor when combined with other factors being used in the evaluation of quality of care, and in achieving a below average death rate in all categories.

Sincerely,

Daniel S. Fruchter
Vice President/Administrator

UNIVERSITY HOSPITAL
HEALTH SCIENCES CENTER
STATE UNIVERSITY OF NEW YORK AT STONY BROOK
LONG ISLAND, NEW YORK 11794

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

University Hospital at Stony Brook is a regional referral center serving the Long Island area. In this role, the hospital provides specialized care for the most seriously ill patients in the community.

We welcome the opportunity to compare University Hospital to other hospitals, specifically similar tertiary care centers, but at this time have reservations regarding the statistical model used by the Health Care Financing Administration (HCFA) to predict national mortality rates.

The model fails to consider a number of factors which have a significant impact on mortality. Of major concern is the failure to include any measure of the severity of illness in the prediction of mortality rates. Until such time as a method is developed to accurately measure severity of illness, the data provided will remain questionable.

We would encourage the inclusion of a method to account for DNR (Do not resuscitate) mortalities specific to New York State hospitals, since recent legislation has clarified this issue. This will be a significant factor for hospitals in this area in comparison to the national rate.

In conclusion, we acknowledge the effort of HCFA to improve their methodology over the past year and look forward to their perfection of the statistical model in the future to provide more meaningful information to both the hospitals and the consumers.

Sincerely,

Adrienne Leahy

Adrienne Leahy
Director, Medical Care Review

AL/ij
cc: Mr. W. Newell
T. Cottrell, M.D.
R. Reza, M.D.
P. Ells, M.D.
Mr. S. Mitchell
Mr. M. Kershnar

VASSAR BROTHERS HOSPITAL
Reade Place, Poughkeepsie, New York 12601 (914) 454-8500

Vassar Brothers Hospital has not exceeded the predicted range of mortality in any of the categories published by the Health Care Finance Administration for every hospital involving patients over the age of 65. Through a hospital-wide Quality Assurance Program, however, our hospital has studied many other important aspects of patient care to more extensively evaluate outcome and quality of care. As the largest acute care facility in the Mid-Hudson Valley, we treat an unusually large number of seriously ill patients since we are a regional cancer center and referral base for other complex acute care problems. In many instances, these patients have had conventional treatment elsewhere and come to our institution for more complex therapy. Our Quality Assurance Program must, therefore, look at patient care problems from different viewpoints than just mortality rates. Quality Assurance at our hospital, involves all clinical and support departments and is fully supported by our Medical Staff, Administration and Board of Trustees.

Our Medical Staff committees have re-examined some of the cases in the categories reported in the 1986 mortality rates. With the exception of those few that died after discharge from the hospital, all had been previously evaluated by the medical audit system presently in place. In this re-examination, these committees found no patterns of inappropriate care and concluded that many other elements in patient care beyond mortality statistics need to be evaluated before we can conclude that quality of care is truly measured.

The Health Care Finance Administration and other prominent medical organizations, such as the American Hospital Association and the Joint Commission on Accreditation of Health Care Organizations, are all investigating methods of evaluating hospital quality that will rely on measures in addition to mortality rates. These additional methods must include severity of illness and case mix information to be certain that the measurements are as accurate as possible. Vassar Brothers Hospital applauds these endeavors as we strive toward excellence in our quality of patient care.

WESTFIELD MEMORIAL HOSPITAL, INC.
189 EAST MAIN STREET WESTFIELD, N.Y. 147[illegible] (716) 326-4[illegible]

October 8, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

In reviewing mortality data for the Westfield Memorial Hospital provided to us by you in your letter of September 21, 1987, I'm sure you will be pleased to know that to the best of our determination there is only one error.

Patient ID [redacted] is recorded in your data as having died August 7, 1986 of cancer. The patient's death certificate lists as cause of death pneumonia.

Yours truly,

Morton Flexer

Morton Flexer
Administrator

MF:scw

WHITE PLAINS HOSPITAL MEDICAL CENTER
DAVIS AVENUE AT EAST POST ROAD, WHITE PLAINS, NEW YORK 10601 914 681-0600
DEPARTMENT DIRECT DIAL NUMBER: 914 681-1200

JON B. SCHANDLER
President and
Chief Executive Officer

October 23, 1987

Dr. William L. Roper
The Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr.Roper:

As you have identified, quality care in a hospital cannot be measured by mortality rates alone. Factors such as severity of illness and percent by age category distribution in each hospital catchment area do not appear to be incorporated into your analysis.

In addition, there is no consideration given for hospitals that are faced with a shortage of available nursing home beds and thus cannot effect appropriate transfers of patients. Patients may be staying in hospital beds inappropriately six month to a year due to the lack of sufficient nursing home beds, and this would unfairly add to the mortality rates of particular hospitals.

It should be clearly pointed out to the public that this analysis is somewhat flawed and is not an accurate measure of the quality of care at a particular institution.

Sincerely,

Marcel A. Martino
Executive Vice President
Chief Operating Officer

MAM:cb

0058F

A Non-Profit Charitable Corporation Providing Health Care Since 1893 for the Central Westchester Community

WILLARD PSYCHIATRIC CENTER
ANTHONY N. MUSTILLE, M.D., Executive Director
MAYEED RAHMAN, M.D., Deputy Clinical Director of Inpatient Services
THOMAS C. MURPHY, Director of Administrative Services
THOMAS S. GRAMLEY, Director of Community Services

NEW YORK STATE
OFFICE OF MENTAL HEALTH

STEVEN E. KATZ, M.D., Commissioner

RE: Short Term Acute Care Medicare Patients October 15, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Washington, D.C. 20201

Dear Doctor Roper:

Attached are the corrected documents submitted to us for review.

For your information, our acute medical service, from which those statistics are drawn, is but one part of a large public mental health facility of approximately 600 beds.

At present we have more than four hundred psychogeriatric patients, (average age 78, average length of stay 8291 days), who are cared for when acutely ill in that service. That service is utilized when necessary for our adult population as well; approximately 130 patients at present.

Do not hesitate to contact my office if you have any questions or comments.

Thank you.

Very truly yours,

ANTHONY N. MUSTILLE, M.D.
Director

ANM/blv
Enclosure

ACCREDITED BY JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

Willard, New York 14588 ● (607) 869-3111

91.14 Adm. (MH) (5-86)

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

WINTHROP-UNIVERSITY HOSPITAL
MINEOLA, LONG ISLAND, NEW YORK 11501 • (516) 663-0333
Formerly Nassau Hospital-Established 1896

October 23, 1987

Medicare Provider # 33-0167

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Sir:

In response to your September 21, 1987 advisory concerning selected mortality information for Winthrop-University Hospital, we wish to record our comments as follows:

Data Accuracy

In a case by case review, all patients on the list did have contact with Winthrop-University Hospital during 1986. Within this group, the following errors were noted:

1) Eight errors were found in the assignment of an expiration date or discharge date in cases listed as having expired post discharge. In actuality, these eight expired in the hospital on the discharge date. This reduces the total number of cases expiring post discharge from 34 to 21.

2) One error was found in the date of admission.

Coding or Methodology Critique

HCFA chose to study 16 diagnostic categories and gave the precise ICD-9-CM codes for each group. Those deaths not fitting into 16 selected categories were relegated to a sub-group designated "unknown" for purposes of this study. While we question this term ("other" would seem to be more accurate), we also question the rationale of using "unknown" in 14 other cases:

- Seven cases in V58.1. Coding rules state this must be assigned as the principal code in all cases involving admissions for "Maintenance Chemotherapy". Each case involved patients with active metastasized malignancies. The assumption is that they should be in the High Risk, Cancer grouping.

A major teaching affiliate, State University of New York, Stony Brook School of Medicine

- One case of primary Cancer of the Larynx (ICD-9-CM 161) was grouped with the "unknown" rather than under Cancer.

- Two cases seemed more appropriate for Severe Trauma than "unknown" 1) a fractured pelvis (ICD-9-CM 808) and, 2) an intercranial hemorrhage following surgery (ICD-9-CM 853.02).

- Four other miscellaneous cases also seem more appropriate placed in one of the 16 categories than in "unknown".

We do not question the reasonable concern and interest consumers have in obtaining accurate data regarding quality of care issues. However, we must restate our concern that publication of data in comparative tables will result inevitably in judgments as to high and low quality of care.

We firmly support continued efforts that will devise a more accurate and effective measure and "predictors" of the quality of care, including a tested severity of illness model that would be especially useful in any analysis of mortality utilizing DRG's.

Sincerely,

Martin J. Delaney
Acting Chief Executive Officer

/bb

Woodhull Medical and Mental Health Center

760 Broadway, Brooklyn, New York 11206
(718) 963-8101

Carlos A. Loran
Executive Director

October 26, 1987

Mr. William S. Roper
Administrator HCFA
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

MEDICARE NO. 330396

Dear Sirs:

Thank you for the opportunity to comment on the recent notice announcing the HCFA's intention to publish hospital mortality statistics. HFCA data are not in themselves, measures of hospital performance. At best, they can be used to better focus on potential quality assurance issues. Under no circumstances should they be used as the basis for judging the quality of care provided by different hospitals. Quality judgements can only be made after reviewing the information contained in a patient's medical record.

The following represents our analysis and concerns regarding the HCFA hospital mortality statistics especially as they pertain to Woodhull Medical & Mental Health Center (WMMHC). We would like the following two pages published in the Federal Register.

Sincerely,

Carlos A. Loran

RESPONSE TO MORTALITY DATA MEDICARE NO. 330396

DATA QUALITY

HCFA's files contain 91% of Woodhull deaths but only 85% of its total Medicare patients, which inflates HCFA's "actual" death rates. Paid claims figures from Medicare fiscal agent indicate an "actual" death rate 1 percentage point lower than the HCFA report, bringing Woodhull Hospital within the predicted range.

	Cases	Deaths	Death Rates
HCFA Report	1033	165	16%
Medicare Paid Claims Data*	1209	181*	15%

An under-reporting of cases also inflates Woodhull's mortality rates in at least two of the three diagnostic categories in which the "actual" rate appears to be over the HCFA predicted range. Using more complete billing data, Woodhull is within the predicted range in 14 of 15 categories. We urgently request that the "actual" rates be corrected before the study's publication. We are willing to supply paid claims files to support our counts.

WOODHULL HOSPITAL

Woodhull Medical and Mental Health Center serves the Brooklyn communities of Bedford Stuyvesant, Bushwick, Greenpoint, Williamsburg and Fort Greene. The hospital treats 23,058 inpatients annually from a primary service area that has an age-adjusted mortality rate 150% higher than the national average.

HCFA's study of Medicare mortality rates is based on an untested computer model that uses only patient billing information and does not include a medical chart review to determine if deaths were attributable to errors in medical care. HCFA's methodology omits critical factors which would better predict mortality rates for Woodhull's high risk patient population, such as severity of illness, patient race, socioeconomic status and the effect that multiple diseases have on a patient's prognosis. Only 10% of our patient population have Medicare. 80% of the Medicare patients are Black or Non-white. 90% are poor. 44% of the patients have 5 or more diagnoses and 90% are admitted as emergency priorities. 19% are admitted more than once a year.

Despite the study's flaws and noted data discrepancies, we reviewed 93% of all death cases reported by HCFA to ensure that quality care was provided. The APACHE I chronicity evaluation tool was used to determine the degree of impairment caused by the patient's health problems up to 3-6 months before admission. Patients with the higher degree of impairment (i.e., severely limited in activity) include the bedridden, those unable to work because of their illness or those that require weekly visits to a physician.

*Includes deaths after discharge reported by HCFA.

RESPONSE TO MORTALITY DATA MEDICARE NO. 330386

OVERALL ANALYSIS

95% were admitted as emergency priorities and required critical care intervention. 61% of the deaths occurred within 48 hours of admission; 27% within 24 hours. 76% of all Medicare deaths had five or more complicating illnesses with an average of 4.7 per case.

CEREBROVASCULAR ACCIDENT (27 of 27 reported deaths reviewed) 96% were transported via ambulance. 14% of the deaths occurred within the first 48 hours of admission; an additional 29% died in the ICU. 83% of the deaths had 5 or more secondary illnesses with an average of 5.8 per case including hypertension , heart failure and pneumonia. 39% of the deaths were severely incapacitated prior to admission.

SEVERE ACUTE HEART DISEASE (All 19 reported deaths reviewed) 81% were transported by ambulance. 43% died within 24 hours of admission. 57% died in the ICU. 42% had 5 or more secondary illnesses with an average of 4.9 per case including cardiac arrythmias and diabetes. 52% were severely limited in activity prior to admission.

SEPSIS (12 of 12 reported deaths reviewed) 87% were transported by ambulance. 33% died within 24 hours of admission and 33% died in the ICU. 40% were severely incapacitated prior to admission. 93% of these cases had 5 or more additional illnesses with an average of 7.2 per case including cardiac arrythmias, heart failure, brain hemorrhage, COPD and pneumonia.

Woodhull Hospital will continue its efforts to improve health outcomes for all its patients. Its ongoing review of medical records and 100% review of all patient deaths will continue as part of a comprehensive quality assurance monitoring program.

WYOMING COUNTY COMMUNITY HOSPITAL AND SNF
wcch
Wyoming County Community Hospital and Skilled Nursing Facility

400 North Main Street • Warsaw, New York 14569-1097 • Telephone: (716) 786-2233

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Re: Mortality Data - Medicare 1986

Dear Dr. Roper:

Wyoming County Community Hospital has made a preliminary review of your data. We have not had time to verify your total of Medicare patients or the deaths that occurred at the hospital. We have reviewed those patient records - ten (10) of the one-hundred fifteen (115(where the patient expired within thirty days of discharge.

Of those ten (10) cases, there are two errors where the patients were re-admitted and expired at the hospital. Additional two were patients that expired in our attached skilled nursing facility.

The Medical Staff, as part of its departmental monthly review, examines all deaths and includes the clinical review in their ongoing quality assurance activities.

While our mortality rates, in all categories, are within your ranges of predicted mortality rates, we will make every attempt to analyze the data provided.

Wyoming County is a large rural county in Western New York. The hospital, County owned, is the sole community provider and is expected to respond to the patient needs. We are unique in that we have an attached skilled nursing facility which meets the needs of the County.

We will be utilizing the month of November to further analyze your data so that we will be prepared to comment at the time of your public release in early December.

Sincerely,

Thomas Wheatley

Thomas J. Wheatley
Administrator

YONKERS GENERAL HOSPITAL • YONKERS, NEW YORK, 10701

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: 1986 Mortality Data
Medicare I.D. # 330122

Gentlemen:

Yonkers General Hospital is pleased to find that the 1986 Medicare Mortality Data demonstrate that its mortality rates are within the expected range in all categories.

This is in contrast to the findings of the previous study published in March of 1986 in which Yonkers General was identified as an outliner. Review of the data presented at that time, persuaded us that the methodology was flawed and that a number of serious factors had not been given proper weight. More than that, the intent of the study was to alert the Peer Review Organization to potential problems. The Island Peer Review Organization did indeed conduct a 100% review of mortalities at Yonkers General for 1984 and found no evidence of problems.

We take the data seriously and have begun an intensive review of the categories in which the Hospital statistics are at one extreme or the other of the proposed range of mortalities. Again, the evidence suggests that inadequate weight has been given to such factors as identification of the frail elderly as shown by transfers in from Nursing Homes and by inadequate weight given to transfers from other Institutions as exemplified by our active Oncology Service with its Radiology and Chemotherapy attracting substantial numbers of patients with advanced cancer. More important, probably, is our finding that nearly 100% of the cases identified as having died, were admitted as emergencies suggesting that severity of illness has not been adequately measured.

If the purpose of these studies was merely to alert reviewers and Institutions to the potential for problems and to permit more focused quality reviews, they would be of substantial value. We have used them in that way to the benefit, we believe, of both our Physicians and our patients. But in our view, because of the variability among Institutions and the difficulty of identifying and adjusting for all of the factors involved, they cannot be of use in identifying "good" and "bad" Hospitals.

Very truly yours,

Bertram J. Oppenheimer, M.D.
Administrator

BJO:jo

North Carolina

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALAMANCE CO HOSP 8URLINGTON NC 27215	NC-13 *	1044	16	10-17	117	17	13-32	51	33	18-44	29	21	9-41	76	20	12-30	61	44	24-49	32	16	5-34	93	24	11-29
ALAMANCE MEMORIAL HOSP 8URLINGTON NC 27215	NC-14 *	731	12	8-16	31	23	9-40	38	21	15-44	24	25	5-37	37	19	10-37	56	25	23-49	22	14	4-38	63	16	8-28
ALBEMARLE HOSP ELIZA8ETH CITY NC 27909	NC-15 *	1247	13	11-18	110	28	16-36	59	12	18-42	34	15	8-36	76	22	15-35	55	35	25-52	18	6	3-39	162	17	14-29
ALEXANOER CO HOSP TAYLORSVILLE NC 28681	NC-16 *	354	13	9-19	14	36	11-57	15	13	12-57	12	25	4-49	17	24	8-48	13	46	17-67	15	0	5-47	58	22	11-33
ALLEGHANY CO MEMORIAL HOSP SPARTA NC 28675	NC-17 *	283	16	11-21	7	71	9-70	13	46	11-58	7	29	2-59	15	7	7-48	21	29	17-56	5	0	1-69	62	16	11-32
ANGEL COMMUNITY HOSP- INC FRANKLIN NC 28734	NC-18	733	10	7-15	40	33	12-41	23	43	16-53	23	9	4-36	38	18	11-38	22	23	19-58	9	11	2-53	78	6	9-28
ANNIE PENN MEMORIAL HOSP- REIOSVILLE NC 27320	NC-19 *	783	19	11-18	40	20	16-46	63	30	19-42	31	26	6-34	54	24	11-33	32	47	25-58	28	29	9-41	99	37	12-29
ANSON CO HOSP WAOES8ORO NC 28170	NC-20 *	409	17	12-22	10	50	9-63	37	27	18-47	9	22	5-57	42	10	10-35	31	52	26-61	4	25	2-75	77	25	11-31
ASHE MEMORIAL HOSP JEFFERSON NC 28640	NC-21 *	436	15	10-19	20	35	14-54	16	44	13-56	7	43	2-60	26	15	10-41	16	63	21-66	10	60	5-55	73	18	13-34
8EAUFORT CO HOSP WASHINGTON NC 27889	NC-22	934	16	10-18	89	22	12-32	60	25	19-43	25	12	5-36	57	32	13-35	66	33	24-49	12	25	4-50	101	30	12-29
8ERTIE CO MEMORIAL HOSP WINOSOR NC 27983	NC-23	102	24	12-28	8	75	13-73	12	42	12-62	3	67	0-84	12	25	6-52	3	67	5-85	3	0	0-82	15	7	7-49
8ETSY JOHNSON MEMORIAL HOS OUNN NC 28334	NC-24 *	557	15	8-16	27	26	8-40	17	35	10-50	12	8	3-47	35	31	11-39	34	47	21-54	12	8	2-46	59	27	9-31
8LACKWELDER MEMORIAL HOSP LENOIR NC 28645	NC-25 *	148	8	6-18	3	33	4-85	6	50	6-70	2	50	0-91	8	0	6-61	4	75	7-81	6	0	1-63	23	13	6-39
8LADEN CO HOSP ELIZA8ETHTOWN NC 28337	NC-26 *	399	14	9-18	20	40	14-54	17	18	12-54	10	0	4-54	19	21	8-44	11	55	17-70	11	18	4-51	54	20	9-32
8LOWING ROCK HOSP BLOWING ROCK NC 28605	NC-27 *	119	20	10-24	2	50	0-89	5	40	8-77	5	0	2-69	2	50	1-89	6	33	8-72	3	33	3-83	15	53	10-54
BLUE RIOGE HOSP SYSTEM SPRUCE PINE NC 28777	NC-28 *	621	12	10-18	24	71	17-55	27	33	17-52	9	11	3-55	38	16	12-40	23	39	22-61	22	5	6-41	89	19	15-34
8ROUGHTON HOSP- MEDICAL UN MORGANTON NC 28655	NC-29	130	9	4-16	1	0	1-97	1	0	0-97	4	0	1-74	2	100	1-89	5	40	9-79	8	13	1-56	15	27	4-43
C J HARRIS COMMUNITY HOSP- SYLVA NC 28779	NC-30 *	686	10	8-16	52	25	16-43	27	26	13-47	15	13	5-46	25	28	12-45	21	24	19-59	3	0	1-81	80	15	11-30
CA8ARRUS MEMORIAL HOSP- CONCORD NC 28025	NC-31 *	2719	12	9-16	195	31	17-33	147	29	19-35	51	16	9-33	175	19	15-29	108	29	28-48	49	27	11-37	327	14	13-24
CALOWELL MEMORIAL HOSP- LENOIR NC 28645	NC-32 *	999	14	10-17	62	18	12-36	38	18	17-46	30	37	8-38	57	19	12-34	52	37	28-55	29	17	4-33	119	24	13-29
CAPE FEAR MEMORIAL HOSP IN WILMINGTON NC 28403	NC-33 *	783	11	8-16	51	22	11-36	47	28	17-43	19	21	3-37	36	19	11-38	38	47	25-57	12	33	7-54	69	17	10-30
CAPE FEAR VALLEY HOSP FAYETTEVILLE NC 28304	NC-34	1565	12	8-14	103	24	17-37	53	38	17-41	20	10	4-38	81	23	13-31	36	36	20-52	34	15	8-38	97	24	11-29
CARTERET CO GENERAL HOSP- MOREHEAO CITY NC 28557	NC-35 *	842	13	8-16	57	25	10-34	32	19	12-42	31	16	5-33	45	20	10-34	53	51	25-52	16	19	3-41	57	14	9-31
CATAW8A MEMORIAL HOSP HICKORY NC 28602	NC-36	1090	13	9-16	101	29	17-37	39	18	14-41	19	21	4-40	46	22	10-34	44	36	24-53	23	30	8-44	112	24	14-31
CENTRAL CAROLINA HOSP SANFORO NC 27330	NC-37	749	14	9-16	49	39	14-40	41	39	17-45	12	8	3-47	32	28	9-37	40	35	23-53	18	17	5-43	77	18	10-29
CHARLES A CANNON JR MEMORI 8ANNER ELK NC 28604	NC-38 *	350	9	7-15	11	18	8-58	8	13	8-66	6	0	2-63	15	7	6-47	10	10	14-68	2	0	0-92	59	19	10-31

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALAMANCE CO HOSP BURLINGTON NC 27215	7	29	3-63	15	40	13-59	55	11	3-20	4	0	0-100	120	6	1-10	46	11	1-18	10	10	0-99	76	7	1-12	48	0	0-17
ALAMANCE MEMORIAL HOSP BURLINGTON NC 27215	8	13	2-60	10	60	13-69	28	0	3-29	.	.		70	10	1-13	24	8	0-27	6	0	0-97	69	4	1-12	31	3	0-22
ALBEMARLE HOSP ELIZABETH CITY NC 27909	16	25	10-57	19	37	21-64	42	10	4-25	10	0	0-93	128	9	3-12	77	0	1-15	11	0	0-65	115	5	2-11	31	10	0-20
ALEXANOER CO HOSP TAYLORSVILLE NC 28681	12	8	4-54	2	100	5-93	3	0	1-81	1	0	0-100	32	6	1-21	13	8	1-40	.	.		42	5	2-18	12	0	0-84
ALLEGHANY CO MEMORIAL HOSP SPARTA NC 28675	3	33	1-83	3	67	5-86	2	0	2-90	.	.		32	3	1-21	7	14	3-60	1	0	0-100	21	10	1-27	3	33	0-99
ANGEL COMMUNITY HOSP- INC FRANKLIN NC 28734	6	17	4-69	6	50	9-75	29	3	2-25	.	.		85	5	1-12	56	7	1-17	7	0	0-99	57	4	1-14	38	0	0-28
ANNIE PENN MEMORIAL HOSP- REIDSVILLE NC 27320	11	27	9-63	12	25	12-63	20	10	1-31	.	.		76	14	2-14	32	22	1-23	9	0	0-100	81	1	1-12	24	4	0-41
ANSON CO HOSP WADESBORO NC 28170	7	43	4-66	7	0	11-73	2	0	0-93	.	.		42	5	1-17	10	0	1-47	.	.		40	3	2-19	.	.	
ASHE MEMORIAL HOSP JEFFERSON NC 28640	4	25	1-76	5	20	12-83	13	23	2-42		.		57	4	1-15	14	21	2-40	5	0	0-100	52	8	2-16	10	0	0-78 0
BEAUFORT CO HOSP WASHINGTON NC 27889	7	29	6-68	15	40	15-61	25	12	2-29	9	0	0-99	77	5	2-13	81	9	1-14	8	0	0-99	88	3	2-12	26	4	0-26
BERTIE CO MEMORIAL HOSP WINDSOR NC 27983	2	0	3-91	2	50	6-95	1	0	0-100	.	.		3	0	0-90	5	0	0-74	.	.		6	0	0-68	2	0	0-100
BETSY JOHNSON MEMORIAL HOS OUNN NC 28334	11	18	6-58	7	71	7-69	10	0	0-49	1	0	0-100	64	2	1-13	39	8	2-21	10	0	0-100	44	5	1-17	15	0	0-72
BLACKWELOER MEMORIAL HOSP LENOIR NC 28645	.	.		3	0	2-82	1	0	0-100	1	0	0-100	13	0	0-40	6	0	0-83	.	.		18	6	0-31	7	0	0-96
BLAOEN CO HOSP ELIZABETHTOWN NC 28337	7	14	3-64	10	20	12-67	22	9	2-31	.	.		44	7	1-17	2	0	0-100	2	0	0-100	34	6	1-19	7	0	0-95
BLOWING ROCK HOSP BLOWING ROCK NC 28605	10	20	11-68	4	0	5-80	2	50	0-92	1	0	0-100	11	0	0-48	3	0	0-95	.			17	0	0-32	1	0	0-98
BLUE RIOGE HOSP SYSTEM SPRUCE PINE NC 28777	5	0	0-75	14	14	13-61	13	23	1-41	.	.		62	2	1-14	8	0	0-55	2	0	0-100	71	0	1-13	51	0	0-13
BROUGHTON HOSP- MEDICAL UN MORGANTON NC 28655	.	.		1	0	0-97	5	0	0-71	3	0	0-100	14	0	1-37	5	0	0-75	2	0	0-100	13	8	0-41	1	0	0-100
C J HARRIS COMMUNITY HOSP- SYLVA NC 28779	10	40	11-68	3	0	2-82	18	11	1-33	4	0	0-100	83	0	1-11	64	3	1-15	21	0	0-99	68	4	2-13	43	0	0-20
CABARRUS MEMORIAL HOSP- CONCORO NC 28025	32	13	9-44	10	50	11-66	85	6	2-15	14	0	0-98	281	5	2-8	134	9	3-14	29	0	0-80	258	5	2-8	145	1	0-6
CALOWELL MEMORIAL HOSP- LENOIR NC 28645	18	17	5-48	20	35	16-57	28	4	3-28	2	0	0-100	101	5	2-11	39	0	1-20	6	0	0-100	106	4	2-12	48	2	0-16
CAPE FEAR MEMORIAL HOSP IN WILMINGTON NC 28403	9	0	5-61	13	23	12-62	21	0	2-32	18	0	0-80	86	5	2-13	25	8	0-26	12	0	0-100	68	3	1-13	68	0	0-12
CAPE FEAR VALLEY HOSP FAYETTEVILLE NC 28304	19	11	7-49	31	52	18-54	22	9	3-32	6	0	0-100	120	8	2-12	98	3	1-13	19	5	0-91	124	7	2-10	49	2	0-15
CARTERET CO GENERAL HOSP- MOREHEAD CITY NC 28557	10	20	6-60	15	27	14-60	32	3	2-24	.	.		94	5	2-13	26	4	0-25	12	0	0-100	93	5	1-11	38	3	0-17
CATAWBA MEMORIAL HOSP HICKORY NC 28602	10	30	4-58	19	32	15-58	50	12	4-22	17	6	0-78	116	6	2-11	44	2	0-18	5	0	0-100	68	4	1-13	44	2	0-16
CENTRAL CAROLINA HOSP SANFORO NC 27330	15	40	12-61	3	0	6-87	40	13	2-22	.	.		82	5	2-13	49	6	1-17	5	0	0-100	79	1	1-12	35	6	0-25
CHARLES A CANNON JR MEMORI BANNER ELK NC 28604	.	.		3	0	4-84	12	0	1-42	.	.		22	5	1-27	4	0	0-84	1	0	0-100	25	8	1-24	15	7	0-54

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																							
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CHARLOTTE MEMORIAL HOSP ME CHARLOTTE NC 28232	NC-39	3895	14	9-16	323	30	18-33	163	25	19-34	70	21	8-29	154	23	15-30	273	28	28-42	72	22	8-30	230	20	12-25
CHATHAM HOSP INC SILER CITY NC 27344	NC-40 *	402	16	12-21	34	29	8-36	27	19	15-49	13	15	3-46	34	9	9-37	22	45	22-62	13	31	6-52	77	21	12-32
CHERRY HOSP- GENERAL MEDIC GOLOSBORO NC 27530	NC-41 *	87	8	4-18	.	.		2	50	2-90	3	0	0-83	1	100	0-97	1	0	0-97	6	0	2-64	20	10	6-41
CHOWAN HOSP EOENTON NC 27932	NC-42 *	541	18	13-21	42	36	14-43	48	35	17-43	8	13	2-56	54	17	11-33	32	50	23-56	8	0	1-56	81	22	15-35
CLEVELANO MEMORIAL HOSP- I SHELBY NC 28150	NC-43 *	1646	14	10-16	138	29	17-35	69	32	17-39	32	13	6-34	79	19	14-34	85	40	29-51	44	23	12-40	136	22	12-28
COLUMBUS CO HOSP INC WHITEVILLE NC 28472	NC-44 *	1134	12	10-17	49	33	22-50	52	19	18-43	35	11	8-37	62	24	12-32	45	36	23-51	14	14	5-49	131	21	12-28
COMMUNITY GENERAL HOSP OF THOMASVILLE NC 27360	NC-45	776	16	8-16	41	51	14-43	33	27	15-46	13	15	2-43	43	26	12-38	49	49	23-51	20	5	6-42	59	24	8-28
COMMUNITY HOSP OF ROCKY MO ROCKY MOUNT NC 27801	NC-46 *	240	7	7-17	6	33	7-71	8	25	8-65	9	0	4-56	16	0	6-45	12	25	14-65	2	0	1-89	19	21	5-39
CRAVEN CO HOSP NEW BERN NC 28560	NC-47	2035	12	9-15	153	27	17-35	101	26	19-37	57	14	8-31	111	22	14-30	65	42	27-51	34	24	8-37	187	18	13-27
CRAWLEY MEMORIAL HOSP BOILING SPRINGS NC 28017	NC-48 *	101	15	8-23	5	20	8-78	10	60	12-66	3	0	0-83	7	57	5-64	5	20	7-76	3	33	0-84	13	0	3-45
OAVIE CO HOSP MOCKSVILLE NC 27028	NC-49	453	10	9-18	15	40	13-58	18	44	15-57	12	8	3-47	24	29	10-43	14	50	24-73	6	17	6-71	60	10	11-33
OAVIS COMMUNITY HOSPITAL STATESVILLE NC 28677	NC-50 *	660	11	8-16	35	23	13-43	28	43	16-50	18	11	5-42	28	18	9-40	20	35	25-67	10	0	2-50	85	16	10-28
OOROTHEA OIX HOSP RALEIGH NC 27611	NC-51 *	202	6	3-12	5	20	3-70	4	50	3-75	5	20	0-71	1	0	0-98	.	.		5	0	1-69	31	16	5-32
OUKE UNIVERSITY HOSP OURHAM NC 27710	NC-52 *	5244	9	7-13	582	17	17-31	91	26	17-36	99	15	11-30	111	19	14-31	180	34	27-43	40	23	10-39	204	22	12-25
OUPLIN GENERAL HOSP- KENANSVILLE NC 28349	NC-53	376	18	11-20	22	50	8-44	35	31	15-45	20	25	4-39	24	4	8-41	34	35	22-55	10	30	6-58	49	18	7-29
OURHAM CO GENERAL HOSP- OURHAM NC 27704	NC-54 *	2823	13	9-16	234	19	15-30	114	27	20-38	81	25	10-29	131	21	14-29	138	25	30-48	50	26	8-33	236	31	15-28
FORSYTH MEMORIAL HOSP- WINSTON-SALEM NC 27103	NC-55	5585	13	9-15	454	30	19-33	228	28	21-34	129	20	11-28	270	28	17-29	177	40	29-45	107	21	10-29	507	25	15-25
FRANKLIN MEMORIAL HOSP LOUISBURG NC 27549	NC-56 *	499	12	9-18	20	55	12-51	40	23	17-45	10	30	3-52	17	12	9-49	11	45	19-72	14	36	6-50	60	17	12-35
FRYE REGIONAL MEDICAL CENT HICKORY NC 28601	NC-57	1278	13	8-15	109	21	15-34	60	28	18-42	30	13	6-36	50	26	10-32	61	48	25-50	17	12	4-43	129	22	11-27
GASTON MEMORIAL HOSP- GASTONIA NC 28052	NC-58	2653	15	9-16	230	30	17-33	124	24	19-36	50	24	5-28	140	24	14-29	204	34	30-45	55	36	7-30	217	28	11-24
GOOD HOPE HOSP ERWIN NC 28339	NC-59 *	474	15	8-17	19	68	16-58	33	27	15-46	14	21	5-48	37	27	9-36	8	50	11-71	16	19	4-44	60	27	13-35
GRACE HOSP INC MORGANTON NC 28655	NC-60	1170	14	9-16	71	30	15-38	47	30	17-43	21	24	6-41	68	24	13-33	49	43	27-55	16	25	5-46	133	20	11-26
GRANVILLE MEDICAL CENTER OXFORO NC 27565	NC-61	433	20	10-18	19	63	9-49	18	39	13-54	15	7	5-45	29	38	8-38	23	48	22-61	11	27	2-48	77	23	9-28
HALIFAX MEMORIAL HOSP- ROANOKE RAPIOS NC 27870	NC-62 *	1434	12	9-16	62	29	15-39	77	25	18-39	35	20	8-36	77	22	12-31	73	38	26-50	38	11	7-35	151	15	11-26
HAMLET HOSP HAMLET NC 28345	NC-63 *	290	13	8-18	14	36	12-59	10	40	7-58	5	60	4-72	23	9	8-41	19	26	16-57	8	25	2-56	24	13	7-39
HAYWOOO CO HOSP CLYOE NC 28721	NC-64 *	1393	12	9-15	81	32	15-37	56	21	16-40	27	15	6-37	84	20	15-34	62	42	25-50	28	25	11-44	132	19	12-28

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CHARLOTTE MEMORIAL HOSP ME CHARLOTTE NC 28232	79	19	10-38	34	47	18-52	97	10	6-20	5	0	0-100	184	10	3-10	145	8	1-11	27	0	0-63	660	6	4-8	127	2	0-7
CHATHAM HOSP INC SILER CITY NC 27344	7	29	9-73	12	58	13-64	6	0	0-68	.	.		37	0	1-18	10	0	0-60	1	0	0-100	31	3	1-21	3	0	0-99
CHERRY HOSP- GENERAL MEOIC GOLOSBORO NC 27530	.			.	.		.	.		.	.		5	0	0-69	3	0	0-99	.	.		2	0	0-98	1	0	0-100
CHOWAN HOSP EOENTON NC 27932	11	18	9-63	6	50	9-75	4	0	1-74	2	0	0-100	65	6	2-15	8	0	1-54	2	0	0-100	39	8	1-19	9	0	0-67
CLEVELANO MEMORIAL HOSP- I SHELBY NC 28150	22	32	9-51	26	23	22-61	57	5	3-19	5	0	0-100	206	8	2-10	98	5	2-13	36	0	0-78	150	5	2-9	54	0	0-15
COLUMBUS CO HOSP INC WHITEVILLE NC 28472	45	18	13-46	31	35	23-59	17	12	2-35	1	0	0-100	69	4	1-13	56	4	1-16	6	0	0-100	193	3	2-9	48	4	0-14
COMMUNITY GENERAL HOSP OF THOMASVILLE NC 27360	13	31	8-57	4	50	6-81	32	3	2-25	2	0	0-100	87	8	2-12	45	16	1-18	7	0	0-99	58	7	1-14	27	0	0-46
COMMUNITY HOSP OF ROCKY MO ROCKY MOUNT NC 27801	2	0	3-92	5	60	9-80	9	11	1-50	.	.		21	0	0-28	5	0	0-98	4	0	0-100	44	0	1-17	21	0	0-37
CRAVEN CO HOSP NEW BERN NC 28560	13	31	4-52	40	30	21-53	50	2	3-20	23	0	0-64	159	6	2-10	79	3	1-14	29	0	0-67	185	5	2-9	146	1	0-6
CRAWLEY MEMORIAL HOSP BOILING SPRINGS NC 28017	.	.		1	100	1-97	.	.		.	.		5	0	0-81	3	0	0-82	.	.		6	0	0-70	4	0	0-99
OAVIE CO HOSP MOCKSVILLE NC 27028	5	20	4-73	4	25	7-82	5	0	1-67	1	0	0-100	42	0	1-17	18	11	1-33	2	0	0-100	60	3	2-15	14	0	0-55
OAVIS COMMUNITY HOSPITAL STATESVILLE NC 28677	7	29	4-65	5	40	7-77	33	3	3-27	8	0	0-99	74	8	2-13	25	8	1-27	4	0	0-100	57	7	1-15	79	0	0-9
OOROTHEA OIX HOSP RALEIGH NC 27611	1	0	0-97	2	100	1-89	1	0	0-100	20	0	0-92	27	0	1-24	20	0	0-44	2	0	0-100	4	0	0-89	1	0	0-100
OUKE UNIVERSITY HOSP OURHAM NC 27710	73	11	6-35	22	50	18-58	63	11	3-18	297	0	0-3	260	5	2-9	145	5	1-11	52	0	0-31	760	6	3-7	442	1	0-4
OUPLIN GENERAL HOSP- KENANSVILLE NC 28349	4	0	2-76	4	25	2-75	.	.		.	.		23	0	0-26	15	20	3-40	2	0	0-100	42	7	1-17	3	0	0-99
OURHAM CO GENERAL HOSP- OURHAM NC 27704	21	29	6-47	81	43	23-48	129	7	4-16	18	0	0-85	241	6	2-9	123	3	1-11	47	0	0-55	197	8	2-9	236	0	0-5
FORSYTH MEMORIAL HOSP- WINSTON-SALEM NC 27103	47	26	13-46	42	38	20-51	196	8	4-13	19	0	0-88	482	8	4-10	183	9	3-13	47	2	0-33	539	4	3-7	280	1	0-4 0
FRANKLIN MEMORIAL HOSP LOUISBURG NC 27549	6	0	5-70	1	100	0-97	10	0	1-47	.	.		51	8	1-16	15	7	2-38	2	0	0-100	69	4	2-14	10	0	0-61 0
FRYE REGIONAL MEOICAL CENT HICKORY NC 28601	10	20	9-65	8	63	8-66	57	16	4-21	3	0	0-100	143	2	1-9	70	1	0-14	22	0	0-92	79	1	1-12	97	1	0-8
GASTON MEMORIAL HOSP- GASTONIA NC 28052	20	15	6-47	17	53	16-61	96	7	4-17	5	0	0-100	305	7	2-8	117	6	2-12	25	8	0-92	212	4	2-8	95	2	0-8
GOOO HOPE HOSP ERWIN NC 28339	1	0	0-99	.	.		10	10	1-47	.	.		36	3	1-19	17	6	2-36	2	0	0-100	55	4	1-14	25	4	0-30
GRACE HOSP INC MORGANTON NC 28655	15	27	10-58	14	29	15-64	28	7	3-28	12	0	0-98	155	7	2-10	73	8	2-16	27	0	0-82	121	3	2-10	38	3	0-22
GRANVILLE MEOICAL CENTER OXFORO NC 27565	8	50	9-69	9	56	12-69	19	21	2-34	.	.		47	2	1-16	16	13	1-35	1	0	0-100	42	2	1-17	2	0	0-100
HALIFAX MEMORIAL HOSP- ROANOKE RAPIOS NC 27870	25	32	9-49	26	50	19-57	32	3	2-24	3	0	0-100	121	7	2-10	93	6	1-13	16	0	0-98	145	3	2-10	68	0	0-11
HAMLET HOSP HAMLET NC 28345	1	100	0-98	1	100	1-98	1	0	0-100	.	.		20	0	1-30	28	11	2-26	.	.		31	10	1-20	4	25	0-100
HAYWOOO CO HOSP CLYOE NC 28721	7	14	1-63	11	36	13-66	57	11	2-18	5	0	0-100	150	5	2-10	89	6	1-13	14	0	0-96	147	7	3-11	67	0	0-11

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																								
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HCA-RALEIGH COMMUNITY HOSP RALEIGH NC 27611	NC-65 *	898	10	8-15	77	10	11-32	39	23	15-43	15	33	5-45	42	21	10-35	40	40	23-53	16	13	6-47	64	13	11-32
HERITAGE HOSP TARBORO NC 27886	NC-66 *	626	15	9-17	43	23	10-37	25	36	13-48	20	40	9-47	33	15	9-37	25	24	21-58	21	33	8-44	76	25	10-30
HIGH POINT MEMORIAL HOSP HIGH POINT NC 27260	NC-67	2161	14	9-16	178	24	13-30	122	35	20-38	55	18	8-31	141	25	14-28	106	39	29-50	44	16	7-33	159	29	14-29
HIGHLANOS-CASHIERS HOSP- I HIGHLANOS NC 28741	NC-68	90	28	11-28	5	100	10-81	7	57	8-69	6	33	2-64	7	43	3-61	8	38	14-74	5	0	1-68	8	13	4-58
HIGHSMITH RAINEY MEMORIAL FAYETTEVILLE NC 28301	NC-69 *	1426	11	8-15	85	19	15-36	62	31	19-42	17	12	5-43	73	19	12-32	50	44	26-53	35	23	9-38	107	22	11-28
HOOTS MEMORIAL HOSP YAOKINVILLE NC 27055	NC-70	311	20	10-20	13	23	8-54	12	33	15-65	13	31	6-50	9	22	7-61	9	56	17-74	20	10	8-46	49	37	15-40
HUGH CHATHAM MEMORIAL HOSP ELKIN NC 28621	NC-71 *	645	13	10-18	19	26	13-54	24	13	15-51	19	37	12-52	36	17	11-38	27	56	24-60	36	28	13-44	90	14	12-30
HUMANA HOSP GREENSBORO GREENSBORO NC 27408	NC-72 *	471	10	7-15	27	15	9-42	20	20	13-52	16	25	7-49	32	34	10-39	14	36	17-64	9	22	3-56	46	13	8-32
IREOELL MEMORIAL HOSP- INC STATESVILLE NC 28677	NC-73	1410	11	9-15	96	27	15-35	61	28	19-42	32	19	5-33	57	16	12-34	60	38	26-52	26	12	7-39	125	16	13-29
J ARTHUR OOSHER MEMORIAL H SOUTHPORT NC 28461	NC-74 *	299	10	8-17	23	26	12-49	11	64	10-60	5	0	1-68	9	22	6-58	10	60	13-67	2	0	5-93	46	7	8-32
JOHN UMSTEAO HOSP BUTNER NC 27509	NC-75 *	54	15	4-22	.	.		1	0	0-97	2	0	0-93	1	100	1-97	.	.		6	17	3-66	14	21	4-44
JOHNSTON MEMORIAL HOSP- SMITHFIELO NC 27577	NC-76 *	809	13	8-15	53	9	11-35	48	35	15-40	17	12	3-39	51	27	11-34	34	29	22-54	14	36	7-52	67	27	11-32
KINGS MOUNTAIN HOSP- INC KINGS MOUNTAIN NC 28086	NC-77 *	476	19	10-19	32	53	16-49	30	27	12-43	18	17	5-43	20	20	6-40	38	53	23-54	26	8	8-41	51	24	10-33
L RICHAROSON MEMORIAL HOSP GREENSBORO NC 27406	NC-78 *	226	18	7-18	9	44	7-61	10	30	7-58	7	0	4-63	23	26	8-42	4	75	6-80	10	20	2-51	21	14	6-40 0
LAKE NORMAN REGIONAL MEOIC MOORESVILLE NC 28115	NC-79 *	525	12	9-17	18	28	9-48	20	25	11-49	16	13	3-40	39	15	10-35	33	52	25-59	24	13	4-36	67	21	12-34
LENOIR MEMORIAL HOSP- KINSTON NC 28501	NC-80	1854	13	9-16	114	32	15-34	103	28	19-37	36	19	5-31	80	23	15-34	112	37	29-48	44	23	6-31	193	18	12-25
LEXINGTON MEMORIAL HOSP- LEXINGTON NC 27292	NC-81 *	760	12	9-16	46	50	16-44	34	15	16-47	19	5	4-40	52	12	12-35	38	47	22-52	9	33	2-53	65	18	8-28
LINCOLN CO HOSP LINCOLNTON NC 28092	NC-82 *	538	17	10-18	26	35	10-44	38	24	17-46	9	11	1-51	36	25	10-38	50	38	25-53	9	11	3-54	63	27	11-32
MARGARET R PAROEE MEMORIAL HENOERSONVILLE NC 28739	NC-83 *	1966	10	9-16	153	25	18-35	92	24	19-39	32	16	9-38	84	10	14-32	74	34	26-50	51	8	9-34	203	23	15-28
MARIA PARHAM HOSP HENOERSON NC 27536	NC-84	735	16	8-16	41	29	8-35	30	37	14-46	31	10	4-31	33	15	11-40	29	55	23-58	25	24	5-38	95	23	10-27
MARTIN GENERAL HOSP- WILLIAMSTON NC 27892	NC-85	234	16	8-19	4	100	6-80	15	20	9-52	15	13	3-41	15	13	4-43	13	46	15-63	8	38	2-56	33	18	7-34
MCPHERSON HOSP OURHAM NC 27701	NC-86 *	130	1	0-13	7	0	1-59	.			1	0	0-99	.	.		.	.		.	.		1	0	0-97
MEOICAL PARK HOSP WINSTON-SALEM NC 27103	NC-87	911	2	5-12	197	6	15-31	3	0	4-84	6	17	4-67	.	.		1	0	1-97	6	17	3-66	10	10	3-51
MEMORIAL MISSION HOSP OF W ASHEVILLE NC 28801	NC-88 *	3050	12	9-15	188	18	16-33	130	25	21-37	32	13	12-43	111	18	16-33	148	41	28-46	30	30	9-40	248	21	13-26
MERCY HOSP INC CHARLOTTE NC 28207	NC-89	1811	13	9-16	167	23	15-33	80	23	18-38	27	7	5-35	92	28	15-33	100	36	28-49	58	19	10-34	175	16	10-24
MONTGOMERY MEMORIAL HOSP TROY NC 27371	NC-90	412	15	9-18	28	46	11-44	11	18	6-55	12	8	5-50	23	17	10-44	32	38	23-56	17	0	4-42	47	19	8-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Cynecology			Low Risk Hearl Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HCA-RALEICH COMMUNITY HOSP RALEIGH NC 27611	7	0	2-63	9	67	10-66	24	4	2-29	18	0	0-97	95	4	2-12	69	9	1-15	10	0	0-95	75	5	2-14	55	4	0-12
HERITAGE HOSP TARBORO NC 27886	12	8	4-54	8	50	12-73	23	9	1-28	4	0	0-100	74	3	2-15	31	16	1-23	6	0	0-99	46	7	1-16	27	4	0-31
HIGH POINT MEMORIAL HOSP HIGH POINT NC 27260	12	25	6-56	17	29	18-63	86	6	3-16	6	0	0-100	234	7	2-9	83	2	1-13	32	0	0-85	174	6	2-9	126	2	0-7
HIGHLANOS-CASHIERS HOSP- I HIGHLANOS NC 28741	1	0	0-100	.			.	.		.			5	0	1-67	2	50	1-89	.	.		12	8	0-43	.	.	
HIGHSMITH RAINEY MEMORIAL FAYETTEVILLE NC 28301	11	9	2-53	23	43	16-55	39	13	5-28	.	.		150	2	2-11	62	3	1-15	21	0	0-98	106	4	2-10	77	3	0-10
HOOTS MEMORIAL HOSP YAOKINVILLE NC 27055	4	50	2-76	3	100	3-84	9	44	4-55	.	.		49	4	2-17	9	11	1-50	7	0	0-99	20	15	1-28	12	8	0-59
HUGH CHATHAM MEMORIAL HOSP ELKIN NC 28621	12	17	7-57	6	83	10-76	9	0	2-51	.			77	4	2-13	28	4	1-24	3	0	0-100	54	2	1-14	23	13	0-26
HUMANA HOSP GREENSBORO GREENSBORO NC 27408	2	0	1-90	2	0	2-90	4	0	0-85	43	0	0-50	30	3	1-23	18	0	1-32	6	0	0-100	39	0	1-17	49	0	0-16
IREOELL MEMORIAL HOSP- INC STATESVILLE NC 28677	15	20	8-55	17	41	19-65	55	7	3-19	17	0	0-86	155	7	2-10	73	4	1-14	19	0	0-98	142	5	2-10	98	0	0-8
J ARTHUR OOSHER MEMORIAL H SOUTHPORT NC 28461	3	67	1-82	1	100	2-98	4	25	1-74	.	.		55	2	1-15	13	0	0-52	3	0	0-100	46	0	1-16	6	0	0-98
JOHN UMSTEAD HOSP BUTNER NC 27509	.	.		.	.		2	0	0-98	.	.		1	0	0-99	1	0	0-100	.	.		3	0	0-99	.	.	
JOHNSTON MEMORIAL HOSP- SMITHFIELO NC 27577	9	11	3-58	11	27	15-68	22	14	2-30	.			88	6	1-11	40	3	1-19	20	0	0-94	48	15	1-15	49	2	0-16
KINGS MOUNTAIN HOSP- INC KINGS MOUNTAIN NC 28086	8	50	7-66	8	38	10-69	21	10	2-30	.	.		65	6	2-14	14	7	0-39	4	0	0-100	41	2	1-17	20	0	0-49 0
L RICHARDSON MEMORIAL HOSP GREENSBORO NC 27406	1	100	1-97	4	100	11-87	2	0	0-95	2	0	0-100	23	9	1-27	9	0	0-58	2	0	0-100	19	5	1-30	13	8	0-85
LAKE NORMAN REGIONAL MEDIC MOORESVILLE NC 28115	14	7	6-54	3	0	4-85	8	0	0-55	1	0	0-100	53	4	1-15	24	4	1-27	1	0	0-100	66	5	1-12	16	0	0-54
LENOIR MEMORIAL HOSP- KINSTON NC 28501	33	45	12-49	29	28	22-59	55	9	4-22	6	0	0-99	137	6	2-10	77	1	1-14	9	0	0-98	259	2	2-8	91	0	0-8
LEXINGTON MEMORIAL HOSP- LEXINGTON NC 27292	8	38	5-64	6	0	8-73	24	0	2-30	4	0	0-100	89	3	2-12	47	4	1-18	9	0	0-100	91	2	2-11	22	5	0-27
LINCOLN CO HOSP LINCOLNTON NC 28092	5	60	4-73	2	50	4-92	1	0	0-99	1	0	0-100	82	7	2-12	41	5	2-20	4	0	0-100	49	8	1-15	9	0	0-57
MARGARET R PAROEE MEMORIAL HENDERSONVILLE NC 28739	10	20	5-59	10	30	13-68	64	0	3-19	6	0	0-100	233	6	2-9	91	1	1-13	17	0	0-94	150	4	2-10	152	0	0-6
MARIA PARHAM HOSP HENDERSON NC 27536	4	25	1-76	16	44	15-61	23	4	1-28	.	.		78	0	1-11	54	7	1-16	5	0	0-100	51	12	1-15	25	0	0-47
MARTIN GENERAL HOSP- WILLIAMSTON NC 27892	2	50	1-90	6	50	8-73	.	.		.	.		20	0	2-32	6	17	0-70	4	0	0-100	20	5	1-28	3	0	0-99
MCPHERSON HOSP OURHAM NC 27701	.	.		.	.		.	.		76	1	0-19	1	0	0-100	.	.		.	.			.		.	.	
MEDICAL PARK HOSP WINSTON-SALEM NC 27103	1	0	0-97	1	0	1-97	.	.		8	0	0-99	177	2	2-10	197	1	1-10	58	0	0-20	4	0	0-81	62	0	0-11
MEMORIAL MISSION HOSP OF W ASHEVILLE NC 28801	15	40	11-59	34	38	20-54	107	10	4-17	86	0	0-12	207	9	3-11	71	3	1-15	20	0	0-98	401	6	3-8	302	2	0-4
MERCY HOSP INC CHARLOTTE NC 28207	19	26	8-51	22	23	15-54	33	6	3-25	4	0	0-100	162	6	2-9	85	2	1-13	16	0	0-95	241	7	3-9	98	0	0-9
MONTGOMERY MEMORIAL HOSP TROY NC 27371	4	50	1-76	2	50	7-95	7	0	1-57	.	.		46	7	2-19	18	11	0-33	5	0	0-100	39	3	1-17	9	11	0-79

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MOORE REGIONAL HOSPITAL IN PINEHURST NC 28374	NC-91 *	2743	11	9-15	208	21	17-33	212	23	20-34	69	14	10-31	102	30	14-31	79	39	28-51	33	21	10-40	220	24	14-27
MOREHEAO MEMORIAL HOSP- EDEN NC 27288	NC-92 *	742	14	10-18	49	29	14-41	30	27	15-47	17	35	8-48	43	16	11-36	43	51	26-56	21	24	7-43	94	18	12-30
MOUNTAIN PARK MEDICAL CENT ANDREWS NC 28901	NC-93 *	231	10	8-18	4	50	9-85	11	18	13-65	8	13	3-57	16	31	11-54	6	50	9-75	3	0	1-81	31	16	7-35
MURPHY MEDICAL CENTER MURPHY NC 28906	NC-94	353	12	10-19	9	33	9-64	16	19	14-58	14	21	3-44	18	6	8-45	24	25	22-60	7	29	4-63	67	16	11-31
NASH GENERAL HOSP ROCKY MOUNT NC 27801	NC-95 *	2073	12	10-17	144	33	17-35	117	17	20-38	42	24	7-32	155	26	16-31	83	30	26-49	60	10	11-35	202	17	13-26
NEW HANOVER MEMORIAL HOSP- WILMINGTON NC 28403	NC-96 *	3127	12	8-14	241	27	15-31	118	31	19-36	70	17	9-30	154	22	15-29	102	30	27-47	50	20	9-35	256	17	13-25
NORTH CAROLINA BAPTIST HOS WINSTON-SALEM NC 27103	NC-97	4179	12	9-15	420	26	20-35	110	25	20-38	86	22	13-34	102	16	14-31	153	39	28-46	59	22	10-33	168	30	14-29
NORTH CAROLINA MEMORIAL HO CHAPEL HILL NC 27514	NC-98 *	2796	11	9-15	296	17	18-33	65	37	15-37	67	19	11-33	80	19	14-33	112	35	27-46	57	26	12-38	173	19	14-28
NORTHERN HOSP- OF SURRY CO MOUNT AIRY NC 27030	NC-99	1183	12	10-17	65	26	14-37	45	42	20-47	21	19	5-39	74	31	14-34	56	39	26-52	30	20	8-39	143	22	14-30
ONSLOW MEMORIAL HOSP JACKSONVILLE NC 28540	NC-100*	771	13	9-17	50	40	14-40	37	24	14-43	17	6	5-43	42	29	9-34	38	34	22-52	17	18	7-48	79	15	11-30
OUR COMMUNITY HOSP SCOTLAND NECK NC 27874	NC-101*	62	23	11-31	3	100	3-83	8	50	9-67	1	0	1-97	4	0	2-74	3	33	6-87	3	33	6-86	9	22	3-54
PARK RIOGE HOSPITAL FLETCHER NC 28732	NC-102	556	11	8-17	22	9	5-39	16	19	10-52	7	29	4-63	27	30	11-43	16	56	18-63	18	22	4-42	82	15	13-33
PENOER MEMORIAL HOSP- BURGAW NC 28425	NC-103*	425	12	10-19	17	41	9-50	23	26	12-47	8	25	4-59	29	3	9-38	14	57	20-68	15	20	11-57	70	17	11-31
PERSON CO MEMORIAL HOSP ROXBORO NC 27573	NC-104*	333	17	10-20	11	27	9-60	9	11	9-64	9	11	2-53	33	36	11-39	24	38	20-58	18	33	11-52	38	37	12-39
PITT CO MEMORIAL HOSP GREENVILLE NC 27834	NC-105*	3147	13	9-15	237	23	17-33	143	34	19-36	45	16	9-35	135	26	14-28	126	36	27-46	66	24	11-35	217	22	14-28
PRESBYTERIAN HOSP CHARLOTTE NC 28233	NC-106	4495	11	9-15	530	22	16-30	204	23	21-35	104	9	8-25	199	21	16-29	215	33	30-45	62	11	9-32	339	19	12-23
PRESBYTHERIAN SPECIALTY HO CHARLOTTE NC 28204	NC-107*	114	0	0-12	5	0	1-68	1	0	0-97	.	.		.	.		.	.		.	.		1	0	0-97
PUNGO OISTRICT HOSP BELHAVEN NC 27810	NC-108*	166	19	9-21	5	40	7-76	7	29	7-67	5	0	2-68	11	18	9-58	13	54	15-64	2	0	0-95	25	4	7-38
RANOOLPH HOSP ASHEBORO NC 27203	NC-109*	1053	11	8-15	66	30	14-37	39	23	16-44	21	10	4-37	48	23	13-38	68	22	27-51	17	29	4-43	80	15	10-29
REX HOSP RALEIGH NC 27607	NC-110	2975	11	10-16	307	29	20-35	106	15	18-36	70	10	10-31	147	20	16-31	125	32	28-47	44	7	9-36	252	19	14-27
RICHMOND MEMORIAL HOSP- ROCKINGHAM NC 28379	NC-111*	542	16	11-19	44	27	13-40	23	43	15-52	5	20	1-68	43	16	12-38	37	51	23-55	12	0	3-48	78	15	11-30
ROANOKE CHOWAN HOSP AHOSKIE NC 27910	NC-112	906	14	11-18	54	28	16-42	49	33	16-42	29	10	8-39	42	14	11-36	44	32	25-54	24	25	4-37	134	19	12-27
ROBERSONVILLE COMMUNITY HO ROBERSONVILLE NC 27871	NC-113*	72	18	7-25	3	100	9-90	3	0	3-84	2	0	0-93	5	20	2-68	4	50	7-82	1	0	0-99	13	23	5-49
ROWAN MEMORIAL HOSP SALISBURY NC 28144	NC-114	2176	13	9-16	167	25	15-32	134	21	20-36	57	19	9-32	95	16	14-32	99	35	29-50	50	20	6-30	204	23	12-26
RUTHERFORO HOSP INC RUTHERFOROTON NC 28139	NC-115*	1265	14	10-17	71	28	15-38	65	32	20-43	18	28	5-42	84	23	13-31	70	49	29-53	28	21	5-35	146	21	14-29
SAMPSON CO MEMORIAL HOSP- CLINTON NC 28328	NC-116*	780	14	11-19	30	47	11-42	46	22	17-44	33	12	6-34	54	26	13-36	52	38	24-51	10	20	5-56	66	23	12-33

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MOORE REGIONAL HOSPITAL IN PINEHURST NC 28374	18	33	10-55	33	21	19-53	102	10	5-18	72	0	0-14	219	8	3-10	169	1	1-10	28	4	0-92	130	2	2-10	273	1	0-4
MOREHEAD MEMORIAL HOSP- EDEN NC 27288	3	0	1-82	7	43	10-73	31	6	3-27	.	.		86	6	2-13	48	6	1-18	3	0	0-100	73	0	1-12	18	6	0-37
MOUNTAIN PARK MEDICAL CENT ANDREWS NC 28901	3	33	2-83	1	0	0-97	9	0	1-50	.	.		26	4	1-24	4	0	0-79	1	0	0-100	23	0	0-25	17	0	0-45
MURPHY MEDICAL CENTER MURPHY NC 28906	3	33	2-83	5	40	10-80	.	.		.	.		34	3	0-19	7	0	0-63	2	0	0-100	36	3	1-18	6	0	0-97
NASH GENERAL HOSP ROCKY MOUNT NC 27801	18	17	5-48	11	27	11-63	42	2	4-24	.	.		198	8	3-10	68	7	2-16	25	0	0-52	199	4	2-9	79	1	0-10
NEW HANOVER MEMORIAL HOSP- WILMINGTON NC 28403	39	21	5-38	25	56	21-59	67	7	3-18	12	0	0-99	309	6	3-9	122	7	1-12	37	0	0-30	287	4	3-9	137	3	0-6
NORTH CAROLINA BAPTIST HOS WINSTON-SALEM NC 27103	63	14	9-39	37	49	21-54	80	23	6-22	198	0	0-4	232	6	3-11	87	1	2-14	23	4	0-58	689	6	4-8	220	1	0-5 0
NORTH CAROLINA MEMORIAL HO CHAPEL HILL NC 27514	46	15	6-38	24	38	20-60	64	13	3-19	34	0	0-46	185	5	2-10	84	5	1-14	19	0	0-98	334	7	3-8	151	1	0-6
NORTHERN HOSP- OF SURRY CO MOUNT AIRY NC 27030	7	14	4-66	17	29	17-62	36	3	4-27	1	0	0-100	127	3	2-10	55	4	2-18	14	0	0-83	116	2	2-11	49	0	0-14
ONSLOW MEMORIAL HOSP JACKSONVILLE NC 28540	13	31	5-54	11	55	14-68	21	10	3-33	8	0	0-100	75	4	1-13	32	0	1-23	2	0	0-100	90	2	2-12	33	0	0-28
OUR COMMUNITY HOSP SCOTLAND NECK NC 27874	.	.		4	25	9-85	.	.		.	.		4	0	0-84	3	0	0-87	2	0	0-100	2	0	0-99	1	0	0-100
PARK RIDGE HOSPITAL FLETCHER NC 28732	10	50	12-68	7	14	12-76	10	10	1-47	1	0	0-100	65	5	2-15	35	3	1-22	10	0	0-100	60	5	1-14	27	4	0-37
PENDER MEMORIAL HOSP- BURGAW NC 28425	7	14	5-67	2	0	2-90	1	0	0-100	.	.		42	2	1-17	14	7	2-40	4	0	0-100	50	6	1-15	3	0	0-100
PERSON CO MEMORIAL HOSP ROXBORO NC 27573	3	0	3-85	4	25	4-78	1	0	0-100	.	.		33	3	1-20	10	30	1-47	4	0	0-98	59	2	1-14	5	0	0-97
PITT CO MEMORIAL HOSP GREENVILLE NC 27834	58	19	9-39	28	50	22-59	85	15	4-18	21	0	0-75	245	10	3-10	89	4	1-13	31	0	0-84	348	6	2-7	187	2	0-5
PRESBYTERIAN HOSP CHARLOTTE NC 28233	30	33	10-48	33	48	21-56	148	5	4-15	114	0	0-8	471	4	3-8	216	6	1-10	81	0	0-15	467	4	3-7	159	1	0-6
PRESBYTHERIAN SPECIALTY HO CHARLOTTE NC 28204	.	.		.	.		.	.		57	0	0-24	1	0	0-100	.	.		.	.		1	0	0-100	.		
PUNGO DISTRICT HOSP BELHAVEN NC 27810	4	0	4-79	4	25	9-84	2	0	0-98	.	.		16	0	0-35	2	50	0-94	1	0	0-100	18	28	1-31	3	0	0-100
RANDOLPH HOSP ASHEBORO NC 27203	13	15	8-58	5	40	8-79	41	15	2-21	1	0	0-100	104	6	2-12	90	6	1-13	38	0	0-58	144	5	2-10	55	4	0-12
REX HOSP RALEIGH NC 27607	18	22	7-51	32	34	21-56	95	6	4-17	40	0	0-37	344	6	3-9	107	7	2-13	36	0	0-33	227	3	3-9	167	2	0-6
RICHMOND MEMORIAL HOSP- ROCKINGHAM NC 28379	8	25	6-65	10	20	12-66	6	0	0-63	.	.		54	13	2-16	45	7	2-20	5	0	0-100	51	6	1-16	5	0	0-100
ROANOKE CHOWAN HOSP AHOSKIE NC 27910	18	33	7-50	24	33	17-55	27	11	3-28	3	0	0-100	71	10	2-15	36	11	2-22	2	0	0-100	93	2	2-11	15	7	0-51
ROBERSONVILLE COMMUNITY HO ROBERSONVILLE NC 27871	4	25	3-78	.	.		1	0	0-100	.	.		4	0	0-92	3	0	0-93	.	.		7	29	0-62	1	0	0-100
ROWAN MEMORIAL HOSP SALISBURY NC 28144	29	34	11-48	37	35	20-52	77	8	3-17	2	0	0-100	208	5	2-9	130	6	1-11	23	0	0-82	230	5	2-8	103	0	0-8
RUTHERFORD HOSP INC RUTHERFORDTON NC 28139	8	25	1-60	10	30	10-63	52	6	2-19	4	0	0-100	162	7	3-11	36	6	1-21	7	0	0-100	147	3	2-9	35	3	0-23
SAMPSON CO MEMORIAL HOSP- CLINTON NC 28328	15	33	8-55	39	31	20-53	22	0	2-30	3	0	0-100	59	5	1-14	32	0	1-23	8	0	0-99	111	2	2-10	13	0	0-56

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																					
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease			
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SCOTLANO MEMORIAL HOSP LAURIN8URG NC 28352	NC-117*	670	13	9-17	30	27	10-41	42	21	14-41	24	17	4-35	47	19	11-35	37	49	22-53	22	18	9-46	75	19	10-29
SEA LEVEL HOSP OIV OUKE UN SEA LEVEL NC 28577	NC-118*	144	17	7-20	5	20	7-76	10	10	9-62	4	50	2-74	7	29	5-63	2	100	4-93	3	0	1-81	26	23	7-38
SLOOP MEMORIAL HOSP CROSSNORE NC 28616	NC-119*	305	10	9-19	18	44	20-63	7	29	9-70	3	33	2-82	19	21	9-46	9	44	15-72	4	25	3-76	46	9	10-34
SOUTHEASTERN GENERAL HOSP- LUMBERTON NC 28358	NC-120	1794	14	8-15	100	38	15-35	71	27	17-39	31	19	6-34	97	23	12-29	82	52	28-51	38	5	6-34	198	19	11-25
ST JOSEPHS HOSP ASHEVILLE NC 28801	NC-121*	3707	9	7-14	373	20	17-31	103	30	19-38	79	13	8-27	153	20	16-30	99	33	28-49	28	18	6-36	342	15	12-24
ST LUKES HOSP COLUM8US NC 28722	NC-122*	458	12	9-17	40	13	11-39	30	47	17-50	19	0	5-40	22	5	7-40	18	33	22-66	16	13	6-47	53	19	8-30
STANLY MEMORIAL HOSP INC ALBEMARLE NC 28001	NC-123*	886	15	11-18	45	13	13-40	66	30	18-41	17	18	7-46	59	36	14-37	67	37	26-51	24	13	5-38	102	23	12-30
STOKES REYNOLOS MEMORIAL H DAN8URY NC 27016	NC-124	316	17	13-24	5	60	6-74	38	16	21-52	6	33	4-67	17	29	8-48	18	61	18-61	5	40	3-71	73	22	16-37
SWAIN CO HOSP 8RYSON CITY NC 28713	NC-125*	352	13	9-18	28	39	14-48	16	19	11-53	9	22	3-54	31	35	12-43	13	31	19-69	8	13	2-57	30	13	8-36
THE 8RUNSWICK HOSP SUPPLY NC 28462	NC-126	246	15	7-17	13	46	8-55	11	45	9-59	1	0	0-99	11	18	4-51	13	54	20-69	2	0	0-96	30	27	8-37
THE MCDOWELL HOSPITAL MARION NC 28752	NC-127*	756	14	10-17	40	53	18-48	30	37	14-45	17	18	6-45	68	22	13-33	37	43	22-53	16	6	2-40	100	21	12-29
THE MOSES H CONE MEMORIAL GREENS8ORO NC 27420	NC-128	3377	11	8-14	269	20	14-29	112	26	20-38	54	17	10-33	157	25	14-28	143	29	27-45	54	15	9-33	190	22	12-25
THE ORTHOPAEOIC HOSP OF CH CHARLOTTE NC 28207	NC-129*	668	1	1-9	2	0	1-89	.	.		1	0	0-97	1	0	0-97	.	.		.	.		4	0	1-74
TRANSYLVANIA COMMUNITY HOS 8REVARD NC 28712	NC-130*	438	11	7-15	22	32	10-47	22	23	10-46	14	21	4-45	21	10	7-41	24	21	18-55	3	33	1-82	19	21	5-40
UNION MEMORIAL HOSP- MONROE NC 28110	NC-131*	852	12	9-16	54	26	16-41	46	26	18-44	21	14	4-38	38	18	10-36	35	40	24-57	20	15	6-42	110	20	10-26
UNIVERSITY MEMORIAL HOSPIT CHARLOTTE NC 28221	NC-132	178	11	7-18	10	20	3-51	7	29	9-70	5	20	1-68	6	33	4-66	8	50	12-72	9	0	1-52	30	13	5-32
US PHS INOIAN HOSP CHEROKEE NC 28719	NC-133*	82	12	6-22	1	100	0-97	2	0	3-91	.	.		4	50	5-79	1	100	1-97	2	0	0-92	11	27	6-54
VALOESE GENERAL HOSP- INC VALOESE NC 28690	NC-134	616	12	8-16	45	20	11-38	17	18	12-53	12	0	2-45	40	38	10-35	30	43	22-56	13	8	3-46	79	18	10-29
WAKE CO HOSP SYSTEM RALEIGH NC 27610	NC-135*	3472	10	8-14	164	23	17-34	185	23	19-33	53	21	8-31	166	22	16-30	125	30	26-45	84	18	8-28	193	23	12-26
WASHINGTON CO HOSP PLYMOUTH NC 27962	NC-136*	209	18	11-22	6	50	8-73	12	17	9-57	4	0	2-75	17	6	9-49	14	29	17-64	7	14	2-61	31	29	9-38
WATAUGA HOSP INC 8OONE NC 28607	NC-137*	867	11	8-16	62	27	17-42	27	22	14-48	13	15	5-49	35	31	12-40	33	36	19-51	15	20	4-44	105	14	12-29
WAYNE MEMORIAL HOSP GOLOS8ORO NC 27530	NC-138	1801	15	10-17	147	38	19-37	84	35	19-40	26	23	7-40	103	23	14-31	108	38	27-47	21	19	7-44	186	22	13-27
WESLEY LONG COMMUNITY HOSP GREENSBORO NC 27402	NC-139	2297	10	8-15	200	21	16-32	110	25	20-38	47	13	7-31	92	15	14-32	82	40	28-50	39	23	6-34	160	21	12-26
WESTERN CAROLINA CENTER HO MORGANTON NC 28655	NC-140*	35	3	0-22	.	.		.	.		2	50	0-95	.	.		.	.					3	0	0-85
WILKES GENERAL HOSP- NORTH WILKESBORO NC 28659	NC-141*	1012	13	9-16	42	24	17-46	52	37	18-43	32	25	9-39	41	22	12-38	49	53	26-54	18	28	4-41	142	17	11-26
WILSON MEMORIAL HOSP- WILSON NC 27893	NC-142*	2218	13	9-16	136	38	19-38	125	23	19-36	41	27	7-33	131	16	14-29	112	35	27-47	47	30	8-34	205	22	12-25

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SCOTLANO MEMORIAL HOSP LAURINBURG NC 28352	16	19	8-54	9	33	11-67	14	0	1-38	.	.		76	1	1-12	31	6	1-23	8	0	0-100	54	2	1-14	16	0	0-66
SEA LEVEL HOSP OIV OUKE UN SEA LEVEL NC 28577	3	0	3-84	1	0	1-97	.	.		.	.		19	0	0-30	1	0	0-98	1	0	0-100	18	17	0-31	7	29	0-82
SLOOP MEMORIAL HOSP CROSSNORE NC 28616	5	0	3-73	3	0	4-85	1	0	0-100	.	.		40	0	1-18	15	0	1-36	8	0	0-100	25	0	1-24	11	9	0-60
SOUTHEASTERN GENERAL HOSP- LUMBERTON NC 28358	21	19	5-46	16	38	12-57	58	3	2-17	4	0	0-100	175	3	2-10	70	7	1-15	10	0	0-100	209	2	2-8	43	2	0-21
ST JOSEPHS HOSP ASHEVILLE NC 28801	19	26	9-52	27	15	18-55	128	9	4-16	9	0	0-100	443	5	3-8	243	3	1-10	50	0	0-39	186	4	2-9	483	1	0-3
ST LUKES HOSP COLUMBUS NC 28722	3	67	4-86	5	40	5-74	28	7	1-24	8	0	0-100	57	4	1-14	22	0	0-29	1	0	0-100	32	6	1-20	28	7	0-33
STANLY MEMORIAL HOSP INC ALBEMARLE NC 28001	15	40	6-52	5	20	5-73	45	9	3-22	.	.		84	4	1-12	25	8	1-26	4	0	0-100	104	2	2-11	27	0	0-27
STOKES REYNOLOS MEMORIAL H OANBURY NC 27016	4	25	1-76	2	0	6-94	.	.		.	.		18	11	1-31	9	11	0-53	1	0	0-100	51	4	2-17	2	0	0-99
SWAIN CO HOSP BRYSON CITY NC 28713	6	0	3-68	3	33	4-84	10	0	1-47	.	.		63	2	1-14	14	29	1-39	3	0	0-100	33	3	1-20	14	0	0-55
THE BRUNSWICK HOSP SUPPLY NC 28462	3	33	4-85	.	.		3	0	0-84	.	.		35	3	1-19	7	14	1-58	1	0	0-100	41	5	1-17	12	0	0-71
THE MCOOWELL HOSPITAL MARION NC 28752	4	25	7-83	9	22	8-63	17	6	1-34	.	.		91	3	2-13	29	0	0-24	16	0	0-99	64	2	1-13	24	0	0-44
THE MOSES H CONE MEMORIAL GREENSBORO NC 27420	43	35	10-44	24	33	22-62	86	3	4-17	38	0	0-31	255	5	3-9	157	5	1-11	32	0	0-77	542	3	3-7	155	1	0-6
THE ORTHOPAEOIC HOSP OF CH CHARLOTTE NC 28207	1	0	0-97	.	.		84	4	4-17	.	.		.	.		2	0	0-96	.	.		4	0	0-89	427	0	0-4
TRANSYLVANIA COMMUNITY HOS BREVARO NC 28712	5	20	3-73	5	60	7-76	27	11	1-26	2	0	0-100	39	8	2-20	19	0	0-34	6	0	0-100	36	11	1-18	34	0	0-30
UNION MEMORIAL HOSP- MONROE NC 28110	12	25	7-58	9	22	12-70	40	10	2-22	.	.		91	1	2-12	49	4	0-18	10	0	0-100	102	5	2-11	43	0	0-18
UNIVERSITY MEMORIAL HOSPIT CHARLOTTE NC 28221	1	0	1-97	2	50	6-94	5	0	1-67	.	.		19	0	0-30	13	23	0-41	3	0	0-100	15	0	1-35		.	
US PHS INOIAN HOSP CHEROKEE NC 28719	5	0	1-71	1	100	2-98	.	.		.	.		.	.		1	0	0-99	.	.		4	0	0-82	3	0	0-100
VALOESE GENERAL HOSP- INC VALOESE NC 28690	10	10	7-62	2	0	2-90	18	11	2-33	.	.		74	3	1-13	29	0	1-24	11	0	0-98	73	1	1-13	26	0	0-30
WAKE CO HOSP SYSTEM RALEIGH NC 27610	54	11	7-38	46	37	23-54	84	6	3-17	2	0	0-100	218	4	2-9	160	12	2-12	26	4	0-67	700	3	4-8	269	1	0-4
WASHINGTON CO HOSP PLYMOUTH NC 27962	3	67	7-88	1	100	2-98	.	.		.	.		24	4	1-25	2	50	0-89	.	.		23	9	1-26	1	0	0-100
WATAUGA HOSP INC BOONE NC 28607	5	0	5-75	7	29	17-81	26	4	2-28	3	0	0-100	105	5	2-12	48	6	1-18	17	0	0-90	72	10	2-14	68	1	0-11
WAYNE MEMORIAL HOSP GOLOSBORO NC 27530	14	43	7-55	21	38	17-58	55	5	4-22	12	0	0-88	168	5	3-11	75	11	1-15	18	0	0-98	159	4	2-9	92	0	0-8
WESLEY LONG COMMUNITY HOSP GREENSBORO NC 27402	16	0	8-54	19	21	21-64	88	8	4-18	14	0	0-92	315	3	2-8	129	2	1-11	18	0	0-100	147	3	2-10	197	2	0-5
WESTERN CAROLINA CENTER HO MORGANTON NC 28655	.	.		.	.		1	0	0-100	.	.		1	0	0-100	3	0	0-100	.	.		.	.		2	0	0-100
WILKES GENERAL HOSP- NORTH WILKESBORO NC 28659	11	27	5-57	5	40	8-78	48	4	2-19	11	0	0-95	105	6	2-11	60	12	2-17	17	0	0-98	74	3	1-12	36	0	0-25
WILSON MEMORIAL HOSP- WILSON NC 27893	15	7	7-54	20	15	16-57	51	18	4-23	37	0	0-37	191	4	3-11	74	3	2-16	13	0	0-98	242	7	2-8	100	0	0-8

*Written Comments Not Submitted.

Angel Community Hospital
Franklin, North Carolina 28734 - 1209

October 16, 1987

William L. Roper, M.D., Administrator
Department of Human and Health Services
Health Care Financing Administration
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Mortality Rates Hospital # 340012

Dear Dr. Roper:

Our hospital has reviewed the Mortality Rate Patient Data included with your letter dated September 21, 1987. Some descripencies have occurred. These descripencies are:
[redacted]-This case was transferred from our hospital and directly admitted to Memorial Mission Hospital 7/15/86. The patient expired at Memorial Mission 8/2/86. PLEASE NOTE: It would appear that this case may be appropriate to be included in Mortality Rates where the patient expired.

[redacted]ate of Discharge and Death is 7/8/86
[redacted]--Date of Death and Discharge is 7/4/86
[redacted]--Date of Death and Discharge is 1/14/86
[redacted]--Date of Death and Discharge is 11/4/86
[redacted]--Date of Death and Discharge is 4/18/86
PLEASE NOTE: The incorrect date of death/discharge leaves the impression that the cases expired within 48 hours of discharge, which did not occur. All five patients died while hospitalized.

[redacted]This patient was hospitalized at our hospital 4/7/85 to 4/12/85. PLEASE NOTE: It would appear that this case should not be calculated in the mortality rates. Date of expiration was 2/27/86, almost one year after discharge from our hospital. (From your letter, it is our understanding that the mortality rates were based on death within 30 days of discharge.)

Thank you for the opportunity to comment on the mortality rates. I hope this clarification will be beneficial in publication of final mortality information. Further supporting data is available if desired.

Sincerely,

Saralynn Middleton

Saralynn Middleton, A.R.T.
Medical Records Director

cc: Carolyn Riley, Administrator
Becky Keener, Public Relations

Riverview Street P.O. Box 1209 Tel. 704-524-8411

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Beaufort County Hospital

Ocotber 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

RE: Hospital ID Number - 340038

Dear Sir:

This communication is in respone to the request by HCFA for comments regarding recently released mortality data.

Beaufort County Hosptial fell within the published parameters in every category with the exception of pulmonary disease. The hospital's mortality rate for pulmonary disease was 30% compared to the published acceptable range of 12 to 29%.

In reviewing the 101 cases of pulmonary disease included in the data base, twenty-four (24) of the thirty (30) cases resulting in death involved patients over the age of seventy (70) years. Due to the increased incidence of complications associated with aged patients, it is our contention that the data should be modified to more accurately reflect the overall condition of the patient.

The release of mortality data without adequate disclosure distorts and invalidates the usefulness of the data. For example, a specific mortality included in our database involved a fifty-six (56) year old patient with multiple heart problems including previous myocardial infarction, coronary artery bypass surgery and diabetes mellitus. In our opinion, this additional information is necessary to provide a clear picture of mortality rates.

In summary, we feel that we make every effort possible to deliver quality health care to our community. Publication of incomplete information is damaging to the hospital and community.

Sincerely,

Kenneth E. Ragland

Kenneth E. Ragland
Administrator

KER:as

628 East Twelfth Street Washington, North Carolina 27889
919/975-4100

BERTIE MEMORIAL HOSPITAL

Windsor, North Carolina 27983

Phone: (919) 794-3141

COMMENTS ON THE HCFA MORTALITY DATA
BERTIE MEMORIAL HOSPITAL, WINDSOR, N.C.
PROVIDER #340101

When viewed on a larger scope such as a national scale, the HCFA data raise many legitimate questions. Unfortunately, they do not provide any answers. This is especially true at the local level.

The quality of care rendered a particular patient can only be judged by reviewing the elements of care actually received by that patient. The most practical way to accomplish this is through an analysis of the patient's medical record.

Detailed chart reviews will continue to be the backbone of Bertie Memorial Hospital's excellent Quality ASsurance Program.

The numbers released by HCFA which pertain to Bertie Memorial Hospital are so small that any attempt at statistical analysis would be totally meaningless. The extremely small sample size completely destroys any concept of statistical significance.

The American Hospital Association suggests a group of 100 occurrences would be significant. However, the groupings reported for Bertie Memorial Hospital range in size from one to fifteen occurrences. It is interesting to note that for two groupings, there were no occurrences reported.

For two groupings, Bertie Memorial Hospital was reportedly slightly outside the "predicted range". For one grouping the "predicted range" is 13 to 73% and the actual percent reported for Bertie Memorial Hospital with eight occurrences was 75%. For another grouping with two reported occurrences, the predicted range is 3 to 91% compared to the reported zero.

One could easily say Bertie Memorial Hospital faired quite well with one grouping being slight higher than predicted and one grouping being slightly lower than predicted. However, one should not yield to this temptation.

The numbers being dealt with are just too small to permit any meaningful interpretation. Because this data can be easily misused, the numbers should not be released without an accompanying caution advising of the limitations: that is--this data should not be used to make judgments on the quality of care provided by individual hospitals.

Gary A. Dolack, CEO/Administrator

North Carolina Department of Human Resources
Division of Mental Health, Mental
Retardation and Substance Abuse Services
Broughton Hospital
1000 South Sterling Street • Morganton, North Carolina 28655
Area Code 704/433-2111

James G. Martin, Governor
David T. Flaherty, Secretary

Arthur J. Robarge, Ph.D., M.B.A.
Director

October 27, 1987

Health Care Financing Administration
Health Standard and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

This is in response to your letter of September 21, 1987, wherein you request comments relative to mortality information about hospital I.D. No. 340137.

We wish to advise that all patients admitted to this hospital are primarily psychiatric patients, many of whom are senile and long-term care cases at a psychiatric hospital.

Sincerely,

Arthur J. Robarge

AJR:BS:rc

Cape Fear Valley Medical Center

P.O. Box 2000
1638 Owen Drive
Fayetteville, NC 28302-2000
Telephone 919-323-6151

John T. Carlisle, Director

D. Wayne Whetsell, M.D., Chief of Staff

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Sir:

We appreciate your furnishing us this mortality information in advance for our review prior to public release. While we have received this data, it is virtually impossible to verify its validity since we do not know the specific source data included in this study. We have no practical way of checking its accuracy.

Upon review of the data, we fall within all the ranges of predicted mortality rates for all diagnostic categories which you provided. Consideration, however, should be given to the intensity levels at the compared facilities. As a regional center we receive referral cases with a trend toward the admission of sicker Medicare patients. We suspect that this is due to more stringent Medicare hospital admission criteria relative to severity of illness and intensity of services.

Regarding the sepsis data, review of our Medicare records show that sixteen Medicare patients died in 1986 with the sepsis DRG. Of these, eight were transferred to us from nursing homes with septicemia; three were transferred in from other acute care hospitals, and five were terminal patients being cared for at home.

While there may be some usefulness to the data when looked at from a general perspective, we are concerned with specific efforts to make determinations relative to the quality of care provided from one facility to another using this methodology. Use of this data for such purposes does not appear to be appropriate. A case by case study, reviewed in detail, would be necessary to determine its merits and to make a judgment regarding quality of care provided.

We believe appropriate institutional and governmental review mechanisms already in place better achieve quality review than the public release of data that is statistically vague and may lead to inaccurate conclusions.

Sincerely,

John T. Carlisle

John T. Carlisle
Director

JTC:lph

Dedicated to Quality · Excellence · Compassion

CMH
CATAWBA MEMORIAL HOSPITAL
DAVID O. RICE, SR.
President
HICKORY (704) 322-0450
NEWTON (704) 464-5333
810 FAIRGROVE CHURCH ROAD, S.E.
HICKORY, NORTH CAROLINA 28602

October 28, 1987

Dr. William L. Roper, Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Re: Comment on Mortality Statistics
Hospital Number: 340143

Dear Dr. Roper:

In reviewing the mortality statistics generated for this facility, it appears that there are some discrepancies as well as inconsistencies to which comments have been addressed below.

1. The letter accompanying the statistics states that "the presence or absence of selected comorbidities" was considered in the classification of patients to either the high or low risk category. However, from review of the low risk patients, it is difficult to determine that comorbidities or complications were considered at all but rather that the principal diagnosis alone was used for classification.

2. Twenty-four (24) of the deaths occurred within 30 days post discharge with only one of those returning to the Emergency Department to be pronounced dead. It makes it impossible to determine if the deaths were at all related to the hospitalization. In reviewing the records, the majority of patients were transferred to longterm care facilities with poor prognoses due to multisystem disease.

3. Of the 147 deaths, 115 (78%) were classified as high risk. The average age of the 13 low risk patients was 80 and all had either or both a comorbid condition or complication.

4. 19% of the high risk patients fell into the cancer grouping with another 20% classified as renal disease with minimal potential for recovery.

5. The dates of death on patients [redacted] and [redacted] are incorrect.

6. Patient [redacted] had his last hospital admission 8/26-29/86 rather than 7/30-8/12/86 as stated on the report. Death did occur on 8/29/86.

We appreciate the opportunity to review this information prior to publication.

Sincerely,

James C Fahl MD

James C. Fahl, M. D., Chairman
Quality Assurance Committee

David O. Rice

David O. Rice, Sr., President
Catawba Memorial Hospital

AMI Central Carolina Hospital

October 21, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We appreciate the opportunity to review the Medicare mortality data prior to the December, 1987 publishing date.

Central Carolina Hospital and its medical staff continually strive to provide the highest quality health care to the patients we serve. These statistics will be a helpful tool in our quality assurance program. Physician committees review the care given to all patients who die in our hospital. We will now be able to review the care given in our hospital to patients who died within thirty days of discharge.

We were encouraged to see that in no diagnostic category did our mortality rate exceed the predicted mortality rates.

In our review of the data, some minor discrepancies were found. The following two patients actually were hospitalized in our facility at the time of their death. Your data indicate that they died after discharge from our facility.

	Medicare No.	Name	Age	Death Date
1)	[redacted]	[redacted]	079	08|09|86
2)	[redacted]	[redacted]	074	07|13|86

The following three patients were transferred to another acute care facility on their last admission to our hospital, and therefore, should not be included in our data.

	Medicare No.	Name	Age	Death Date	Receiving Hospital
1)	[redacted]	[redacted]	071	04|02|86	Duke
2)	[redacted]	[redacted]	078	03|12|86	V.A.
3)	[redacted]	[redacted]	085	08|15|86	Duke

Sincerely,

Phil Shaw

Phil Shaw
Executive Director

Hospital I.D. No. 340020

1135 Carthage Street, Sanford North Carolina 27330 919 774-4100

Charlotte Memorial Hospital
& Medical Center, Inc.

A Facility of The Charlotte-Mecklenburg Hospital Authority

Post Office Box 32861
Charlotte, North Carolina 28232-2861
Telephone 704 338-2121

Harry Nurkin, Ph.D.
President

October 22, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Washington , D.C. 20201

Dear Dr. Roper:

Attached you will find Charlotte Memorial Hospital and Medical Center's (provider number 340113) response to HCFA's mortality information for 1986. I would like to take this opportunity to thank you for allowing us to review and respond to the information.

If you have any questions or I can be of any further assistance in reviewing this information, please call me at 704-338-3216.

Respectfully submitted,

M. C. Tarwat

Michael C. Tarwater
Senior Vice President
Charlotte Memorial Hospital
and Medical Center

MCT/p

Attachment

Charlotte Memorial Hospital
& Medical Center, Inc.
A Facility of The Charlotte-Mecklenburg Hospital Authority
Post Office Box 32861
Charlotte, North Carolina 28232-2861
Telephone 704 338-2121

Harry Nurkin, Ph.D.
President

October 22, 1987

Medicare Provider Number: 340113

Charlotte Memorial Hospital and Medical Center is an 825 bed tertiary care center and teaching institution which provides a large number of highly specialized services. Those services include cardiovascular diagnostic and surgical procedures, neurosurgical procedures, and the area's only hospital-based emergency flight service. The Medical Center is a state-designated Regional Trauma Center, with an Emergency Room which saw 85,000 patients in 1986.

The report provided by HCFA indicated that until they "have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of this information, by itself, to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals" (William L. Roper, M.D.). The Voluntary Hospitals of America, Inc. had also emphasized that tertiary care institutions and major teaching centers such as Charlotte Memorial Hospital and Medical Center, which provide a broad range of services for a large geographical area, will provide care for patients with much more serious conditions than the average community hospital. The current unwillingness to adjust for intensity or severity of patient illness provides misleading information, subject to misintrepretation.

Mortality information alone is in no way a valid measure of quality of care at an individual hospital. Charlotte Memorial Hospital and Medical Center's Medical Staff spends a great deal of time and effort assessing the quality of patient care, to include a careful review of mortalities as well as the many other important indicators of high quality patient care.

The HCFA data openly implies that patients admitted to hospitals should not die and/or that the higher the quality, the less likely is the chance of death. In a referral, tertiary hospital, such as Charlotte Memorial Hospital and Medical Center, we are responsible for transfers for terminal treatment, fully knowing that the patient will die. The continuation of HCFA publication of such gross data as an index encourages hospitals to not accept critically ill people in order to look "good" statistically. We should all be embarrassed that this situation can and does occur.

As requested by HCFA, we have attempted to validate as much of the information as possible. We have, however, found this information difficult to replicate as the methodology used by HCFA is different from the widely accepted way mortality rates have historically been calcuated. In addition, we were not provided with the names of patients to validate those cared for at Charlotte Memorial Hospital and Medical Center, but only the names of those who died here or within 30 days of discharge. The HCFA report of 3,895 cases with an average mortality rate of 14% represents the number of Medicare beneficiaries whose last discharge in 1986 was from Charlotte Memorial Hospital and Medical Center. Thus, critically ill patients who were transferred from other facilities for specialized or follow-up care are therefore reflected in our mortality rate which again points to the need for HCFA to provide a better method of measuring the severity of patient illness. In addition, the data does not include the number of times a patient was treated at Charlotte Memorial Hospital and Medical Center as each patient, regardless of the number of admissions, counts as only one case. Statistics kept by Charlotte Memorial Hospital and Medical Center indicate that during 1986 there were 6,316 Medicare patients discharged with a mortality rate of 10%.

A case review of the patients in Charlotte Memorial Hospital and Medical Center during 1986 was conducted and compared to the reported cases by HCFA. Our review also revealed that in many cases, once patients were admitted or transferred to our facility and clinical evaluations performed which indicated the patient had a terminal condition, the patients and/or their families elected terminal supportive care. However, these cases are also reflected in numbers of deaths which are intended to demonstrate the quality of care being provided in our facility.

Charlotte Memorial Hospital and Medical Center compared the statistical information provided by HCFA for the diagnostic categories with our own statistics and found a categorically lower mortality rate for each of the defined areas for the same period of time.

In addition, cases which are included represent a 30 day post admission period which in many instances represent deaths due to other complicating illnesses which have little or no relationship to the previous hospital stay or to matters unrelated to institutionalized care at all. However, the Hospital's specific mortality rate may have been adversely affected by the unrelated events.

Charlotte Memorial Hospital and Medical Center appreciates the opportunity to present our review of the HCFA mortality information as we welcome any opportunity to improve patient care. However, again we must express our concern over the publication of information which only measures mortality as reflective of a hospital's quality of performance using statistics which we are unable to accurately validate.

CGH Community General Hospital
Thomasville, North Carolina

October 21, 1987

Health Care Financing Administration
Health Standard & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

This is in reference to data verification concerning 1986 mortality data.

The data used by HCFA indicate that a total of 135 Medicare patients admitted to our hospital died within 30 days of admission. Of these, 114 died while still a patient of the hospital, while 21 died after discharge. Our own records indicate that 927 Medicare admissions occurred in 1986 as opposed to your data of 776 Medicare admissions. Presumably the discrepancy reflects multiple admissions of individual beneficiaries.

HCFA'a over-all predicted mortality range is from 8% to 16%. Community General Hospital is within this range at 16%. If the mortality rate is calculated with the corrected data, our over-all mortality rate drops to 13%.

Your statistical analysis does not represent a range of factors that have a significant impact on mortality, including: 1) the severity of the patient's illness on admission (how ill the patient was at the time of admission), 2) whether the patient was transferred from another type facility (another hospital, nursing home, etc.), 3) whether the patient had been receiving treatment at home prior to admission, 4) whether the patient had a terminal illness, or 5) the patient's psychological state or general health status. Quality of care can only be determined by looking at individual patient records. Significant deviations from the predicted mortality rate could be the result of either differences in the types of patients admitted to the hospital or differences in patient treatment.

Community General Hospital of Thomasville, Inc.
207 Old Lexington Road ◆ Post Office Box 789
Thomasville, North Carolina 27360 ◆ (919)472-2000

HCFA's data showed that Community General Hospital fell outside the range of predicted mortality rate in one (1) of the 16 high risk diagnostic categories, specifically cancer. After reviewing these records, several issues were revealed: 1) 76% of these patients had been diagnosed previously. 2) 63% of the patients previously diagnosed had undergone unsuccessful chemotherapy, radiation and/or surgical intervention to treat their illness. (Frequently, after aggressive therapy patients are returned from the larger institutions to the local community hospital for palliative care). 3) 67% of the patients could no longer have their care managed by family members and/or community services. 4) Community General Hospital is actively involved in a Hospice program - 20% of the cases reviewed were participants in the Hospice program. 5) 81% of the patients were admitted for supportive care (pain control and/or adequate nutrition).

We welcome data which might indicate a need for focused review. Data is reviewed through our Quality Assurance program to determine if a problem, in fact, exists. When quality problems are identified, corrective action is taken. There is a follow-up of the action to determine improvement or resolution of the problem. This process assists in ensuring quality of care to our patients. Quality of care is of the utmost concern to our governing board, management, physicians and staff.

If there are any questions, please address them to Mr. Perry T. Jones, Hospital President.

SB/dpo

COMMENTS ON THE HCFA MORTALITY DATA
CRAVEN COUNTY HOSPITAL CORPORATION
NEW BERN, NORTH CAROLINA

DATA VERIFICATION

The data used by HCFA indicate that of the 2035 cases (Medicare beneficiaries) treated at Craven County Hospital in 1986, 218 died in the hospital and 30 died outside the hospital within 30 days of admission to Craven County Hospital.

We have no way of verifying deaths outside the hospital. However of the 30 reported by HCFA 6 were readmitted to Craven County Hospital and died in the hospital, 2 were reported with erroneous discharge dates and were in-house deaths, and 1 was not a death.

Our own records indicate that 2639 cases (Medicare beneficiaries) were treated, and 278 died in the hospital.

CRAVEN COUNTY HOSPITAL MORTALITY RATE 1986-MEDICARE

Based on Patients (Beneficiaries): HCFA DETERMINATION

Patients	2035
Deaths	248
Rate	12%

Based on Patients (Beneficiaries): CRAVEN COUNTY HOSPITAL DETERMINATION

Patients	2639
Deaths	278
Rate	10.5%

Add 21 HCFA reported deaths outside hospital within 30 days

	299
Rate	11.3%

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

COMMENTS

A preliminary medical record review was done even though Craven County Hospital did not exceed HCFA ranges for mortality overall or in any of the specific categories. All cases sited in this report were reviewed. Review of these charts revealed appropriate quality of care was rendered. Most cases were patients with multifaceted illnesses in debilitated condition with poor prognosis.

Craven County Hospital, a rural referral center and sole hospital for three (3) counties - Craven, Pamlico, and Jones, offers the following state of the arts facilities, especially in the areas of:

Cardiology
Neurology & Neurosurgery
Oncology
Vascular Surgery
Internal Medicine
Urology
Respiratory Therapy
Radiology

The attending physicians have satellite offices in the counties stated above plus in Lenoir, Carteret, Onslow, and see patients from Beaufort, Pitt, and other North Carolina counties. Due to the referrals from these counties stated previously, there is a higher intensity of illness and a higher intensity of care rendered.

It should be noted that there is a severe shortage of availability of nursing home beds which sometimes causes an increase in the length of stay up to several months. which has a direct affect on inhouse mortality rate. It should also be noted that mortality rates are not an indicator of quality of care.

Davie County Hospital

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Enclosed are the comments concerning the Davie County Hospital Mortality Range as requested by HCFA.

In doing the research we ran across two errors we thought you should know about. The first being a coding error on patient [redacted] It was coded incorrectly at the hospital and submitted. The code is listed 2761 and should be 2765. The other is an error in the date of death on patient [redacted] The date of death is listed as 9-30-86. It was verified by the funeral home as 9-19-86. We did not know if these findings were significant but felt it important to inform you of them.

In closing, thank you for giving us the opportunity to participate in this study.

Sincerely,

Janice McDaniel

Janice J. McDaniel
Manager/Quality Assurance

Sarah S. Bailey

Sarah S. Bailey
Manager/Medical Records

P.O. Drawer 908
Mocksville, NC 27028
(704) 634-8100

"Fully Accredited By The Joint Commission On Accreditation Of Hospitals"

Davie County Hospital

October 19, 1987
Medicare I.D. # 340052

DAVIE COUNTY HOSPITAL RANKS WITHIN PREDICTED MEDICARE MORTALITY RANGE

Davie County Hospital (DCH) ranked within predicted Medicare mortality ranges during 1986, according to a patient analysis conducted by the federal Health Care Financing Administration (HCFA).

Out of the 453 Medicare cases reviewed, Davie County Hospital's actual mortality rate was 10%, only 1% above the low point on a predicted mortality range of 9% to 18%. The predicted mortality range, is in effect, an estimate of mortality rates expected for patients equal in number and similar in characteristics to those treated by the hospital. Predicted mortality ranges used in the analysis were developed by HCFA.

HCFA's data base for the analysis includes only those Medicare admissions that were the last admission of the year for each Medicare patient during 1986, and includes only those deaths that occurred within 30 days of admission, even if death occurred after the patient was discharged. Patient data used in the mortality analysis did not consider such factors as how ill the patient was at the time of admission, whether the patient was transferred from a nursing home or was receiving prior treatment at home, whether the patient had a terminal illness, or the patient's psychological state or general health status.

Out of Davie County Hospital's 902 Medicare admissions during 1986, 453 fell within the prescribed HCFA standards. The HCFA analysis divided data for the 453 Medicare cases reviewed into ten high risk and six low risk diagnostic groups. Davie County Hospital ranked within or below predicted mortality ranges in all sixteen diagnostic categories.

Davie County Hospital ranked below the minimum on ranges of predicted mortality in six diagnostic categories. The categories included severe trauma, pulmonary disease, orthopedic disorders, gynecologic disease, gastrointestinal diseases, and opthalmologic disease. The Hospital experienced Medicare admissions in all six diagnostic categories.

Out of these six diagnostic groups, Davie County Hospital had a 0% mortality rate in five areas including, orthopedic disorders, gynecologic disease, gastrointestinal disease, opthalmologic disease and severe trauma.

Davie County Hospital ranked below the mean in predicted mortality rates in six diagnostic groups. They are gastrointestinal catastrophes, urologic disease, low risk heart disease, metobolic / electrolyte disturbances, renal disease and sepsis.

P.O. Drawer 908
Mocksville, NC 27028
(704) 634-8100

"Fully Accredited By The Joint Commission On Accreditation Of Hospitals"

Davie County Hospital ranked within predicted mortality ranges in the final four categories which include cancer, cerebrovascular accidents, severe chronic heart disease, and severe acute heart disease.

DCH IS COMMITTED TO QUALITY OF CARE

Davie County Hospital's Quality Assurance program is physician directed, approved and controlled.

It is the institution's philosophy that mortality rates alone are not an indicator of quality of care. Quality of care is a comprehensive network of services and controls initiated to assure optimal patient care standards.

The lack of nursing home beds contributes to overall mortality rates attributed to hospitals.

Davie County Hospital constantly monitors and evaluates the care of all patients through comprehensive internal measures. The Quality Assurance Council monitors patient care through review of twenty care areas including such concerns as utilization managment, tissue review, nursing services, safety, and infection control. These measures give the hospital a strong mechanism through which all patients' cases are reviewed for severity of illness, intensity of service, and discharge planning. The Quality Assurance program, under the careful review of the DCH medical staff, is coordinated with Risk Management issues, with a monthly report made to the Davie County Board of Trustees.

The Quality Assurance mechanism is comprised of many components. Utilization management reviews the length of patient hospitalizations, individual treatment, diagnosis, and discharge planning.

All surgical cases and procedures are reviewed for accurracy of diagnosis during Quality Assurance's tissue review. The protection and safety of patients and employees is monitored through safety committee functions.

Noscomial infection rates are monitored and prevention measures updated and reviewed through the Department's infection control plan. The Quality Assurance Department, through the medical staff, reviews all deaths and any significant complications in its mortality / morbitity study.

Quality Assurance includes the medical library, with all staff and physicians kept abreast of new information and research available.

All patient blood transfusions are reviewed in Quality Assurance's blood utilization reports, and the accurancy and completeness of DCH's medical records is closely monitored through random samples of patient records.

There are also numerous departmental monitoring mechanisms. All DCH nursing Departments assess quality of care standards by monitoring care on a continual basis. The care review system includes the assessment of all aspects of hospital operations which affect patient care from billing procedures to actual *bedside care.*

In addition to Quality Assurance controls, the DCH clinical laboratory and radiology departments have additional internal controls in place to assure accuracy of reports.

The Hospital's Support Services Department closely monitors all environmental factors which affect patient care.

Davie County Hospital also has a patient advocacy program in place. In addition to in hospital visits by a patient advocate, the program also includes patient exit polls whereby comments on all aspects of patient care are solicited after discharge. During the year July 1, 1986-June 30, 1987 the Hospital received 398 patient questionnaires. Although the number of questionnaires returned per month varies, patient opinions were generally consistent, with responses falling into the very good range or somewhere between very good and excellent.

Davie County Hospital encourages questions about its quality of care from patients in its commitment to constantly monitor quality of service.

Once again, mortality rates alone do not constitute an adequate measure for quality of care. It is only through comprehensive monitoring systems such as those in place at Davie County Hospital that quality of care can be adequately assessed.

COMMENTS ON THE HCFA MORTALITY DATA
DUPLIN GENERAL HOSPITAL, KENANSVILLE, N.C.
#340120

INTERPRETIVE REMARKS

Duplin General Hospital's overall mortality rate is within HCFA's range of predicted mortality rates. The actual rate exceeds the predicted range in only one category- - - -Cancer- - and for categories - - Urologic Disease, Gynecologic Disease, Orthopedic Disorders and Renal Disease no mortality is reported while the remaining nine (9) categories were in the middle or low end of the range. It is worth noting that for the Cancer Category there were only twenty-two (22) cases with eleven (11) deaths yielding an actual mortality rate of only 6% more than the high end of HCFA's range. Duplin General Hospital houses a hospice program and provides oncology clinic and long-term care (skilled care) services. Within a seven (7) mile radius of Duplin General Hospital there are two (2) nursing homes and one (1) rest home for which the hospital serves as a referral center. Therefore patients with chronic degenerative conditions may be admitted to the hospital shortly before death.

DATA VERIFICATION

The data used by HCFA indicate that a total of 68 Medicare patients admitted to Duplin General Hospital died within 30 days of admission based on HFCA's study of 376 patients (case). Of these, 54 died while still a patient of the hospital while 14 died after discharged. Our own records indicate that 706 Medicare admissions occurred in 1986 and 653 medicare discharges occurred during the same year. Presumably the major difference between 376 admissions ("cases") utilized by HCFA and the 706 admissions recorded in our own records reflects the exclusion of all but the last admission of patients admitted more than once during the year. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

THE RELIABILITY AND VALIDITY OF THE HCFA MODEL

Our remarks regarding the reliability and validity of the HCFA model are summarized as follows:

- this sort of statistical analysis can do no more than identify potential areas for further evaluation;
- such data cannot be used directly as a measure of hospital performance;
- the reliability of the model is unknown, but appears to be quite limited;
- the model has not been validated.

Submitted By: Richard E Harrell
Richard E. Harrell
Administrator
Duplin General Hospital
October 26, 1987

Carolina Medicorp Inc.

CMI

3333 Silas Creek Parkway
Winston-Salem, NC 27103

Carolina Medicorp Inc.

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Forsyth Memorial Hospital, #340014
Medical Park Hospital, #340148
Winston-Salem, N.C.

Dear Dr. Roper:

Thank you for the opportunity to respond to your letter of September 21, 1987 and the accompanying 1986 HCFA selected mortality tables.

Although there are no outlier statistics for our organization's two acute care hospitals, Forsyth Memorial Hospital and Medical Park Hospital, we continue to object to the use of a statistical methodology that ignores important variables, namely, any measure of severity of illness. We believe the lack of these variables cause the model to understate predicted mortality rates.

Specifically, in the example of Forsyth Memorial Hospital in Winston-Salem, N.C., 95 percent of all nursing home patients in our area are brought to this hospital, compared to only 60 percent of all Medicare patients. A well-publicized RAND Corporation study states that patients coming from nursing homes have the highest predicted death rates. That has been our experience as well. These are the frailest patients in our Medicare patient base; they are brought here because they are critically ill.

The selected mortality model does not include this important data.

Second, we believe our success in meeting HCFA's standards for admission of Medicare patients is working to our disadvantage in these tables. Forsyth Memorial Hospital has experienced few Peer Review Organization denials after Medicare patients have been admitted. Thus, our physicians are admitting only patients ill enough to pass stringent HCFA standards.

The selected mortality model does not include this important standard.

Third, our organization includes two acute care hospitals using the same medical staff. One hospital (Medical Park Hospital) specializes in elective surgery for selected patients. Consequently, it has very low mortality. The other hospital (Forsyth Memorial) provides a broad range of tertiary care emergency, surgical and medical services, and as mentioned above, receives virtually all critically ill nursing home patients in the area. As the same physicians are practicing in both hospitals, we believe data from both should be combined, especially now that they are owned by the same organization.

We agree with HCFA's position that on its own the information contained within the selected mortality tables do not constitute a measure of the quality of care at an individual hospital. We concur in your stated conclusion that you "do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals." In reality, however, is that not how uninformed readers will use this data?

Last, you state that HCFA will continue to develop and perfect other measures of quality, with the objective of issuing information which will allow the user to make judgments on the quality of care provided by individual institutions.

In our opinion, until the time when the information is meaningful, dissemination of incomplete and flawed information does not help individual consumers make informed decisions about their health care. It can only serve to create misunderstanding, mistrus and unhealthy concerns regarding hospital care among the elderly citizens of our nation.

Sincerely

Paul M

Paul M. Wiles
President

AMI Frye Regional
Medical Center

AIRBORNE

October 27, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
6325 Security Blvd.
Rm. 2D2 Meadows, East Bldg.
Baltimore, MD 21207

Dear Dr. Roper:

Enclosed are our comments regarding the mortality information prepared by HCFA. Thank you for giving us the opportunity to respond to the data.

Sincerely,

Dennis J. Phillips
Executive Director

tsp

Enclosures

Medicare Provider Number: 34-0116

420 North Center Street, Hickory, North Carolina 28601 (704) 322-6070

SUMMARY OF COMMENTS FOR FRYE REGIONAL MEDICAL CENTER: Mortality review is a necessary screening tool of a quality monitoring process. However, it cannot stand alone as a measure of quality in any circumstance. The HCFA data suggests that our hospital is within an acceptable range of predicted death rates. However, this information does not communicate adequately to the public that Frye Regional Medical Center is a quality institution. We provide highly sophisticated regional services to a very sick patient population. In comparison to a national data base, we treat a more complex, acutely ill patient than most hospitals and have less deaths. Furthermore, our patients are provided a high quality of service that is monitored very closely using an objective, systematic review process. It is essential that the general public understand that quality must be measured in a comprehensive fashion, not simply through mortality statistics. The following detailed comments will substantiate our views on this matter and we encourage you to read them.

A. WHAT TYPE OF FACILITY IS FRYE REGIONAL MEDICAL CENTER?

Frye Regional Medical Center (FRMC) is a 275-bed tertiary care facility serving a nine-county area in northwestern North Carolina. We provide highly sophisticated services such as cardiac catheterization and neurodiagnostics and are the primary provider of neurosurgery, neurology, and pulmonary services.

B. HOW DOES FRYE REGIONAL MEDICAL CENTER MEASURE QUALITY?

The mortality data published by HCFA suggests that we are within a "normal" range of predicted mortality rates. Before we summarize our review and analysis of this data, several important points must be emphasized.

1. Limitations of Mortality Review: Mortality review is a small but critical part of a comprehensive quality assurance program. It is used to identify potential problem areas for further medical review. However, it is not a valid indicator of problems. The review must go much further in an effort to identify the specific factors which contributed to death. At FRMC, we utilize a comprehensive program called PCAP (Patient Care Accountability Program). This program uses an objective, systematic approach to the monitoring of the quality and appropriateness of patient care. When opportunities to improve care are identified, prompt and immediate action is taken to do so.

2. The HCFA Mortality Model: The HCFA model, although much improved over last year, has two limitations which impact how a hospital is viewed:
   a) It does not consider the wide range of factors which contribute to death (i.e., severity of illness). Examples include but are not limited to, the patient's general health status, the stage of the patient's illness, etc.

   b) The model has not been validated: Statistical analysis of mortality rates may be a valid screen for quality review. However, quality judgments can be made only after thorough review of a patient's medical record.

C. VERIFICATION OF DATA

HCFA reported 158 deaths out of 1,278 Medicare cases in 1986 at FRMC. Of these deaths 115 occurred while the patient was still in the hospital and 43 occurred after discharge. Upon review of the data, our records indicate that 118 died in the hospital and 40 died after discharge.

D. INTERPRETATION OF DATA OF MEDICARE PATIENTS WHO DIED WHILE IN THE HOSPITAL

Without further information, the only comment which can be made regarding the HCFA information is that FRMC falls within the predicted range for mortality. However, we utilize a system at our hospital called **MEDISGROUPS** which links severity to our quality monitoring system and provides a more reliable and valid method for comparing mortality data and screening quality issues.

MEDISGROUPS is a universal language of medicine which is based on a set of key clinical findings that indicate the presence of an abnormality. These findings generate objective admission and subsequent severity of illness classifications. Patients are assigned to one of five severity of illness groups, "0" being the lowest and indicating no key clinical findings, and "4" being the highest and indicating the presence of organ failure. Listed below are severity statistics which compare FRMC to a national data base:

1. Severity Data

a) Average Weighted Severity for All Medicare Patients:

	FRMC Data	National Comparative Data
Medical	2.2	1.78
Surgical	1.2	1.16

Interpretation: Overall, FRMC treats a more complex, acutely ill patient when compared to hospitals across the country.

b) Mortality Rate by Severity Group:

Groups	Medical			Surgical		
	FRMC Deaths	FRMC Rate	Nat'l Rate	FRMC Deaths	FRMC Rate	Nat'l Rate
0	1	1.9	1.14	0	0	.42
1	1	1.4	1.72	2	2.4	1.14
2	11	4.3	5.39	7	3.0	2.88
3	57	16.6	19.69	16	15.5	14.08
4	18	61.1	68.97	5	50.0	58.33

Interpretation: Accounting for the fact that our overall severity is higher than the national database, our mortality rates are lower than the national norms. This statistic is based on nearly two years of data which enhances its relevancy. Of the four cases which fell in severity groups 0 and 1, all were expected deaths. More specifically, two were deaths from metastatic disease (cancer), one was a long-term progressive disease where the patient elected not to be treated further, and one had developing pneumonia not evident on admission.

2. Other Pertinent Information for In-Hospital Deaths

a) Case Mix Index - The case mix index on all Medicare patients who died while in the hospital was 1.753. FRMC's case mix for all Medicare patients is 1.45. By comparison, an "average" patient population, would have a case-mix index of 1.0. This data clearly demonstrates that FRMC treats an extremely sick patient population and that those patients who died while at our hospital were significantly more complex and intense than an "average" patient.

b) Source of Admission for In-Hospital Deaths - As evidenced in the following data, the majority of these patients were extremely ill upon admission which supports a greater likelihood of death: 62% were admitted from the emergency room, 16% were admitted from a skilled nursing facility, 8% were transferred to FRMC for regional services, and 14% were admitted directly from the physician's office.

c) High Risk vs. Low Risk Deaths - Only 3 of the 118 deaths were classified as low risk. Of these 3, all were expected deaths. More specifically, one was a 90-year-old GI patient that did not respond to treatment, one was in end-stage liver disease, and one was admitted for a hip fracture and developed a totally unrelated complication that resulted in death.

F. MEDICARE PATIENTS WHO DIED WITHIN 30 DAYS OF DISCHARGE FROM THE HOSPITAL

Upon medical record review of the condition at discharge of the 40 patients who died within 30 days following discharge, our records indicate that 35 had a poor prognosis and death was anticipated. More specifically, 5 of the cases were unrelated to diagnoses and condition at the time of discharge, 12 had metastatic disease (cancer), 8 had severe pulmonary disease, 7 had end-stage heart disease, 4 had extensive cerebrovascular disease, and 4 had progressive renal disease.

Gaston
Memorial

Medicare Provider # 340032000

The Health Care Finance Administration (HCFA) has presented information for educational purposes on the number of Medicare patients treated at all hospitals in 1986 and the number of Medicare patients that died within 30 days of their admission date. HCFA has determined a range of predicted mortality rates for 16 diagnostic categories. Of 13,326 admissions to Gaston Memorial Hospital in 1986, the data used by HCFA indicate that 388 Medicare patients admitted to Gaston Memorial died within 30 days of admission. Of these, 333 died while still a patient in the hospital, while 55 died after discharge.

Our review of the data indicates that five patients listed as having died at Gaston Memorial actually were transferred to other hospitals. Four other patients were categorized based on their next to the last admission rather than their last admission. When last admission/discharge dates were corrected the four patients were assigned to new diagnostic categories.

With revisions, our statistics indicate that a total of 383 Medicare patients admitted to Gaston Memorial in 1986 died within 30 days of admission. Of these, 341 died while still a patient in the hospital, while 42 died after discharge.

GMH is committed to high quality health care services for all patients and we are seriously interested in any tools or measure that assist us in evaluating our services.

In reviewing the HCFA data there are two key points to remember. First, because many factors cannot be accounted for, this data should not be the basis to judge the quality of care or performance at a hospital and second, the HCFA data relates only to Medicare patients. Medicare is a government funded insurance program primarily available to persons 65 or older.

Gaston Memorial is seeing more Medicare patients, as are most hospitals in the Sunbelt. Last year Medicare patients accounted for 47% of patient days at Gaston Memorial.

Older patients are sicker and require longer treatment and recovery periods. In addition, they are less likely to survive serious illness or injury than younger patients.

The HCFA data is limited in its accuracy as many factors are not considered. Most notably, how sick the patient was upon admission is one factor not considered. Also not considered is a patient's individual circumstances such as previous medical history, lifestyle and economic circumstances or patient origin such as transfer from a nursing home. HCFA also has included patients who died after discharge. These deaths were unrelated to the care received while a patient, yet they were attributed to the hospital.

Gaston Memorial Hospital
2525 Court Drive
Post Office Box 1747
Gastonia, NC 28053-1747
704•866•2000

Nonetheless, we have reviewed the data and have scrutinized two of the sixteen categories in which we were 6 percentage points above the range of what HCFA terms the "predicted mortality rate" in the metabolic/electrolyte disturbances category and 4 percentage points in the pulmonary disease category.

The following facts have emerged in both categories:

1) All patients had multiple medical problems that were contributing factors in their deaths. Pulmonary disease patients primarily are treated for pneumonias and chronic lung diseases including emphysema. In addition, patients in this category had previous health problems including heart disease, stroke, cancer and diabetes. In this category, sixty-two percent had previous admissions within the last year.

   Metabolic/electrolyte disturbances patients had dehydration, low potassium or low sodium, all factors that can cause death. The 20 patients who died, in addition to metabolic/electrolyte disturbances, also had previous strokes, cancer, kidney problems, diabetes and heart disease.

   In ALL patients there were previous serious health problems that were contributing factors to their death.

2) A high percentage of the patients who died were over age 75.

   Sixty-five percent (65%) of the 20 patients who died in the metabolic/electrolyte disturbances category were over 75 years of age. Sixty-three percent (63%) of the 60 patients who died in the pulmonary disease category were over age 75.

3) Seventy-three percent (73%) of the patients in the pulmonary disease category and 85 percent of the patients in the metabolic/electrolyte disturbances category requested a desire for a natural death.

   Our medical community maintains a very humanitarian approach to seriously and terminally ill patients. A patient's request for a natural death means that there will not be any heroic measures to interfere with the natural dying process. A natural death allows a patient to "die with dignity;" an important factor for both the patient and family.

4) Upon admission, prognosis or outlook for recovery was poor for all patients who died in these two categories. The majority of these patients were admitted through Emergency Services or were transferred from an extended

> care facility. A high percentage of the patients died within 48 hours. Patients who were transferred from an extended care facility were admitted because of a need for intensified specific treatment that was not available in a nursing home.

Gaston Memorial is the only hospital in the county and it is logical that if a person is seriously ill or near death they will come to our facility. In addition, many families are more comfortable with having a family member die in a hospital rather than at home and the patient is admitted shortly before death.

Our intensive review of these cases indicates that appropriate and quality care was administered in each case.

Gaston Memorial has several internal mechanisms to continuously review quality of care. A review of all admissions is made to ensure that the medical services are necessary and a discharge plan is prepared for patients to ensure that appropriate care after discharge is available. Patient representatives and hospital surveys provide feedback about patient comments and concerns.

In addition, an outside group of physicians reviews Medicare patient charts to ensure that appropriate care was provided.

On review of our Mortality Listing the following patients were found to have been transferred to other hospitals. We question whether they should have been included in our statistics.

These patients are identified by the letters A through E preceding their names on the Mortality Listing.

A - Transferred to the Charlotte Rehabilitation Hospital
Charlotte, North Carolina

B - Transferred to the Veteran's Administration Hospital
Asheville, North Carolina

C - Transferred to Presbyterian Hospital
Charlotte, North Carolina

D - Transferred to Charlotte Memorial Hospital
Charlotte, North Carolina

E - Transferred to the Veteran's Administration Hospital
Winston Salem, North Carolina

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THE REVEREND THOMAS C. DAILY
CHAPLAIN

JOHN A. TAFT, JR.
ADMINISTRATOR &
CHIEF EXECUTIVE OFFICER

GRACE HOSPITAL
INCORPORATED
FOUNDED IN 1906 BY THE REV. WALTER HUGHSON
2201 SOUTH STERLING STREET
MORGANTON, N.C. 28655
704/438-2000

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DR. L. F. WILLIS

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Thank you for the opportunity given to Grace Hospital to respond to your report of mortality data for Medicare patients cared for at Grace Hospital in 1986.

We have reviewed the data and find it accurate in all respects except for the dates of death of two individuals: Patient ID Numbers [redacted] and [redacted] The correct dates of death in each instance are one calendar day earlier than those shown in your detailed listing.

We wish to commend you for your efforts in publishing this data. We recognize fully the goal stated by your Administrator that you "want eventually to reach the point where the issuance of information will allow the user to make judgments on the quality of care provided by individual institutions."

Respectfully submitted,

John A. Taft, Jr.
Administrator & CEO

JATJr:sl

GRANVILLE MEDICAL CENTER
Serving the Community
College Street • Post Office Box 947 • Oxford, North Carolina 27565-0947 • (919) 693-5115 or 528-4445

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Medicare Provider Number: 340127

Dear Sirs:

HCFA data indicate that out of a total of 433 Medicare patients admitted to the hospital, 86 died within 30 days of admissions. Of these, 73 died while still a patient of the hospital, while 13 died after discharge. Hospital records show that 604 Medicare admissions occurred in 1986. This discrepancy represents multiple admissions to the hospital for individual Medicare beneficiaries.

In one of the diagnostic categories, cancer, the hospital's actual mortality rate fell outside of the range of the predicted mortality rate. Granville Medical Center offers an outpatient oncology clinic. However, the hospital does not provide inpatient therapeutic cancer services such as a linear accelerator. As a result, many of the hospital's cancer patients are admitted for supportive, terminal care. Excluding the aforementioned cancer patients, the hospital falls within the range of the predicted mortality rate of all cases.

Granville Medical Center cared for an older Medicare population than the average North Carolina hospital in 1986. The average age for all Medicare patients at the hospital was 73.9 years compared to the state average of 71.7 years. The average age for Medicare mortality cases was 79.3 years compared to the state average of 75.9 years.

Sincerely,

John M. Dillon

John M. Dillon
Administrator

JMD/rod

High Point Regional Hospital

601 North Elm Street
P.O. Box HP-5
High Point, North Carolina 27261
(919) 884-8400

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We are in receipt of your September 21, 1987 letter regarding mortality statistics for Medicare patients treated in our facility in 1986. Both the medical staff and the hospital-wide Quality Assurance Committee have reviewed these mortality statistics, and we have noted that they are all within the expected ranges. Our medical staff reviews every death as part of the hospital's ongoing quality assurance program. Our death reviews involving 1986 patients did not reveal any problem trends.

Sincerely yours,

John A. Cashion

John A. Cashion
Interim President

JAC/pwp

MEDICARE PROVIDER # 34-0004

J. C. McAllister, Jr.
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J. Daniel Butler
President

Alton A. Reeder, M.D.
Chief of Staff

Highlands-Cashiers Hospital
INCORPORATED
P.O. DRAWER NO. 190 TELEPHONE 704/526-2151
Highlands, North Carolina 28741

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

We have reviewed the mortality data concerning patients who expired within thirty days of admission to this facility. Several exceptions have been noted because the Highlands-Cashiers Hospital participates in the swing bed program and receives patients discharged from other acute care hospitals to be admitted to our skilled and intermediate care facility. The exceptions are noted below.

[redacted] Patients admitted to Highlands-Cashiers Hospital skilled nursing facility following discharge from another acute care hospital

[redacted] Patient admitted to Highlands-Cashiers Hospital skilled nursing facility following discharge from another acute care hospital

[redacted] Patient transferred from another acute care hospital for admission to Highlands-Cashiers Hospital skilled nursing facility. Upon arrival here patient's severity of illness warranted admission as an acute care patient

[redacted] Patient discharged home from another acute care hospital on 12-6-86. On 12-7-86 patient required admission here as an acute care patient

[redacted] Patient discharged home from another acute care hospital on 2-6-86. On 2-7-86 patient required admission here as an acute care patient

[redacted] Patient admitted to Highlands-Cashiers Hospital skilled nursing facility following discharge from another acute care hospital

In regard to the 100% mortality of patients with a diagnosis of carcinoma, it should be noted that all of these patients expired in the skilled nursing facility after no further treatment rendered at an acute care level. Therefore, all of these patients would have to be considered admitted for terminal care.

With the exception of the above category, comparison of actual mortality data to predicted ranges, data for Highlands-Cashiers Hospital appears to fall within acceptable ranges.

Sincerely,

Jack A. Calloway
President

JAC/slb

Highlands-Cashiers Hospital

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*		
	In-hospital	Post-hospital	In-hospital	Post-hospital	
CA -- Cancer	4	1	2	0	*see note #1
CE -- Cerebrovascular Accidents	4	0	3	0	*see note #2
GC -- Gastrointestinal Catastrophes	2	0	1	0	*see note #3
GI -- Gastrointestinal Disease	0	0	0	0	
GU -- Urologic Disease	1	0	0	0	*see note #4
GY -- Gynecologic Disease	0	0	0	0	
HL -- Low Risk Heart Disease	1	0	0	0	*see note #5
HM -- Severe Chronic Heart Disease	1	2	1	2	
HS -- Severe Acute Heart Disease	3	0	3	0	
ME -- Metabolic/Electrolyte Disturbances	0	0	0	0	
OP -- Orthopedic Disorders	0	0	0	0	
PN -- Pulmonary Disease	1	0	1	0	
RN -- Renal Disease	0	0	0	0	
SE -- Sepsis	0	0	0	0	
TR -- Severe Trauma	0	0	0	0	
OP -- Ophthalmalogic Disease	0	0	0	0	
UN -- Other Diagnoses	3	2	2	2	*see note #6
Total -- All Categories	20	5	13	4	

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

HMH

HOOTS MEMORIAL HOSPITAL

October 15, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Comments on HCFA Mortality Data, #34006

Dear Gentleman:

The data used by HCFA indicate that a total of 60 Medicare patients admitted to Hoots Memorial Hospital died within 30 days of admission. Of these, 48 died while still a patient of the hospital, while 12 died after discharge. Our own records indicate that 556 Medicare discharges occured in 1986. Our records indicate the same total number of patients expired but 51 died while still an inpatient vs. your figure of 48. Those three patients and correct date of death may be found on attached list high lighted in pink.

HCFA actual mortality rate for sepsis at our hospital is listed as 100%, where as range of predicted mortality rates is 3 to 84%. Our quality assurance committee reviewed these three charts and the following information was gleaned from the records: The average age of the 3 patients was 82½ years. Two were skilled nursing home patients-alive but in a vegetative state. Complicating factors including pneumonia, renal failure and hypoxemia. The third patient had complicating factors of pneumonia, metabolic acidosis complicated by seizures, cardiomyopathy, adult respiratory distress syndrome, acute renal failure and anemia. The quality assurance committee feels that these patients received the best care possible and due to the severity of their illness, age, and complicating factors they would have expired at any institution.

It is my opinion that the publication of the HCFA Mortality Data will only confuse the general public. HCFA states that the information on its own is not a complete measure of the quality of care at an individual hospital. If so, why submit the general public to only half truths ? The statistics themselves are misleading as they take into account the patient's principal diagnosis when the patient may expire after discharge of an

625 WEST MAIN STREET • P. O. BOX 68 • YADKINVILLE, N. C. 27055 • (919) 679-2041

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

unrelated event.

Hospitals which are monitoring their quality of care will not be waiting for these yearly statistics. They are already evaluating their quality of care through ongoing studies on a monthly basis. HCFA states that they will continue to develop and perfect other measures of quality. There is no way HCFA will be able to come up with a statistical data base which will allow the user to make judgements on the quality of care provided by individual institutions. Any mathematician will tell you that statistics can be manipulated to show any point that you are trying to prove. There are too many variables to take into consideration regarding actual cause of death vs principal diagnosis, age of patient and complicating conditions.

In closing, it is up to each individual user to determine where he seeks medical care. Statistics such as those to be printed in December will only confuse the user as to how he perceives his provider of health care. Location of facility, a caring competent medical staff, up-to-date medical equipment, and trained ancillary department personnel makes the hospital what it is and that's not just a bunch of statistics.

Sincerely yours,

Brenda Bowman, R.R.A.
Director, Medical Record Department

Administrator

IREDELL MEMORIAL HOSPITAL

P. O. BOX 1400 / STATESVILLE, NORTH CAROLINA 28677-1400 / TELEPHONE (704) 873-5661

October 20, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Dept. of Health & Human Services
Washington, D. C. 20201

Dear Dr. Roper:

Enclosed please find our comments concerning the HCFA generated mortality data for Medicare patients admitted to Iredell Memorial Hospital in 1986.

We appreciate the opportunity to review the data, and have included information to correct the obvious errors we uncovered during a cursory review. We hope your agency will find ways to refine this exercise in statistics to make it both more reliable and more valid as a measure of quality.

Sincerely,

S. Arnold Nunnery
Chief Executive Officer

/nm

encl.

IREDELL MEMORIAL HOSPITAL

P. O. BOX 1400 STATESVILLE, NORTH CAROLINA 28677-1400 / TELEPHONE (704) 873-5661

COMMENTS ON 1986 HCFA MORTALITY DATA

Medicare Provider #340039

We note that Iredell Memorial Hospital's actual mortality rate lies within the predicted mortality range for each of the 16 diagnostic categories; in most categories, our mortality rate actually falls below the midpoint of the range. We do not see any indication from the HCFA report of areas that warrant further evaluation. Even so, Iredell Memorial does maintain an on-going quality assurance program for the review of all care delivered in our hospital.

The HCFA mortality data submitted to Iredell Memorial covered 157 patients, 24 of whom, according to HCFA, died within 30 days of discharge from the hospital. Our review of the data uncovered several cases of inaccurate information. For example, two of the patients HCFA said died after discharge from Iredell Memorial were in reality readmitted prior to their deaths. We also found two other cases where HCFA reported that death came after discharge, when in reality the patients had not been discharged prior to their deaths. (Enclosed is a list of the cases in question.)

In none of these instances would the correct information have changed our mortality figures, but the presence of these errors does cause one to wonder whether there are errors in other information as well -- such as whether some of the patients reported as dying within 30 days of discharge actually did not die. We do not have ready access to information such as that, and can therefore not judge its accuracy.

We believe, as do many other individuals and organizations, that this information is of questionable reliability and limited value, especially since it fails to consider a wide range of factors which have a significant impact on mortality.

IREDELL MEMORIAL HOSPITAL

P. O. BOX 1400 / STATESVILLE, NORTH CAROLINA 28677-1400 / TELEPHONE (704) 873-5661

"CORRECTED HCFA MORTALITY DATA - 1986"

HIC Number:	
[redacted]	HCFA statistics indicate that the patient was hospitalized from 12/16/86 to 12/18/16 and died on 1/9/87. Our records show that the patient was readmitted on 12/29/86 and died in-house on 1/9/87.
[redacted]	HCFA statistics indicate that the patient was hospitalized from 4/25/86 to 4/29/86 and died on 5/7/86. Our records show that the patient was readmitted on 5/7/86 and died on 5/7/86.
[redacted]	HCFA statistics indicate that the patient was admitted and discharged on 9/24/86 and died on 9/25/86. Our records show that the patient was not discharged on 9/24. The patient was admitted on 9/24/86 and died in-house on 9/25/86.
[redacted]	HCFA statistics indicate that the patient was hospitalized from 3/11/86 to 3/13/86 and died on 3/14/86. Our records show that the patient was not discharged on 3/13. The patient was admitted on 3/11/86 and died in-house on 3/14/86.
[redacted]	HCFA statistics indicate that the patient was hospitalized from 2/20/86 to 2/22/86 and died on 3/22/86. Our records show that following the February hospitalization the patient returned on 3/22/86 and was put in the hospital as an observation patient. The patient expired on 3/22.

Lenoir Memorial Hospital

JAMES E. TODD, CHAIRMAN
L. DANIEL DUVAL, JR. F.A.C.H.E., PRESIDENT

October 27, 1987

William Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The mortality report from your organization has been reviewed. The data had identified patients who have been admitted to Lenoir Memorial Hospital, Inc.

We are questioning the data used as a means to measure quality of patient care. The study does not address the true death rate of the hospital in that the only patients included in the HCFA study expired within 30 days of a hospital admission. Severity of illness, comorbid conditions, actual cause of death and medical staff specialist treating the patients are also excluded from the report. These are factors that our facility feels should be addressed in a mortality report.

I appreciate the opportunity to review the statistics prior to distribution.

Sincerely,

C. S. Canfield, Jr., Director
Supporting Services

sdh

POST OFFICE DRAWER 1678 KINSTON, NORTH CAROLINA 28501-0678 TELEPHONE 919-522-7171

Maria Parham Hospital Association, Inc.
Post Office Drawer 59
Henderson, North Carolina 27536
Phone: (919) 438-4143

Mr. Samuel T. Waddell
Administrator

Mr. C. Swanson Dodd, Jr.
Assistant Administrator

Mr. Woodrow W. Hathaway, Jr.
Controller

Mrs. Shelva Christian, R.N.
Director of Nursing

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207
October 26, 1987

Dear Sirs:

The data used by HCFA indicate that a total of 113 Medicare patients admitted to Maria Parham Hospital died within 30 days of admission. Of these, 84 died while still a patient of the hospital, while 29 died after discharge. Our own records indicate that 1087 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to the hospital. Our records do verify that 84 Medicare patients were actually dead at time of discharge. Twenty-eight (28) were verified as being post discharge deaths. One (1) case could not be verified, in fact, that the patient did die. The attending physician nor the Register of Deeds in the two counties in which the patient was treated have the patient as dying. No death certificate has been filed.

Documentation in records at Maria Parham Hospital identify an expected negative outcome on patients who were discharged and expired later. Physician document factors such as patient age, chronic degenerative conditions, and overall frail health contribute to the expected negative outcome. Documentation shows considerable communication with families about patients condition and slim chances of improvement while considering all factors involved. Documentation shows majority of families wish to have family members discharged to home and understand the expected outcome. Many families in our area choose home care over Nursing Home care simply due to a severe shortage of available nursing home beds. Physicians have documented the acuity of patients and explainations to families of expected outcome.

HCFA data shows a 32% post-discharge rate attributed to pulmonary disease. All cases clearly document an expected negative outcome. Prognosis is skeptical when you consider multiple chronic conditions, advanced age and overall frail health of patients. Our hospital received many chronically ill patients who are cared for at home. As stated above, many families opt to take loved ones home to care for. With the increased acuity of these patients the families can not provide the type of care it is hoped they would receive in a nursing home. The majority of patients are only admitted to the hospital when the patient is close to death. These

"Where Neighbors Care More"

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

admissions occur from private homes as well as from nursing homes/rest homes in the area. In the past few years one can clearly note that patients have an unusually high number of complications or comorbid conditions. These conditions along with the age of the patient makes the expected outcome grim. It is not uncommon to have a 76 year old patient diagnosed as having lung cancer who has developed pneumonia. With this the patient might have underlying chronic conditions such as diabetes, cardiovascular disease, hypertension and renal failure. HCFA has not considered any complicating conditions or complications in their tabulations. In reality these underlying conditions must be considered since they do play a dramatic role in the overall treatment and expected outcome of each case. Many times death may not be an expected outcome at time of patient admission but later death seems a significant possibility.

With the exception of Low-Risk Heart Disease, Severe Acute Heart Disease and Pulmonary Disease the overall death rate of Maria Parham Hospital was somewhat lower than the high point of the prediction interval. As stated above, expected outcome was many times negative on these Heart Disease and Pulmonary Disease cases although death was at times not expected when the patient was admitted or discharged, death was a significant possibility due to the chronic condition of the patient.

You will find attached a listing of corrections in the HCFA data.

Signed,
Mrs. Cathy Wood, RRA
Mrs. Cathy H. Wood, RRA
Medical REcord Administrator

chw

PATIENT	HCFA ADM/DC	HCFA DATE OF DEATH	CORRECT DATE ADM/DC DATE	CORRECT DATE OF DEATH
[redacted]	2-3/2-9	2-11	2-4/2-9	2-11
[redacted]	2-2/2-14	2-26	2-2/2-14	2-19
[redacted]	1-13/1-13	1-31	1-13/1-13	1-13
[redacted]	6-6/6-10	6-30	6-6/6-10	6-13
[redacted]	11-11/11-28	11-30	11-11/11-28	11-28 DOA
[redacted]	9-8/9-16	9-30	9-8/9-16	9-19
[redacted]	2-10/2-15	3-8	2-10/2-15	3-1
[redacted]	9-11/9-14	9-15	9-15/9-15	9-15
[redacted]	10-31/11-3	11-24 Can not verify death. Attending physician nor any register of deeds has the patient as expiring.		
[redacted]	1-14/2-3	2-3	1-14/2-2	2-2
[redacted]	7-10/7-13	7-13	7-10/7-12	7-12
[redacted]	10-3/10-10	10-10	10-3/10-9	10-9

Martin General Hospital

310 South McCaskey Road
P.O. Box 1128
Williamston, N.C. 27892
Tel. (919) 792-2186

October 26, 1987

Health Care Financing Administration
Health Standards Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Sir:

Upon reviewing the mortality data regarding Martin General Hospital, we have found some data errors. These discrepancies have been noted on Worksheet 1.

As a result of our medical record review in connection with the mortality data, we have determined that the deaths resulting from cancer were an anticipated outcome at the time of admission. The unusually small number (5) used for the study, although resulting is a 100% actual mortality rate, tends to give the wrong impression of our facility.

As a rural facility serving a stable census, Martin General Hospital serves a large percentage of patients in the over 65 category.

Sincerely,

George H. Brandt, Jr.
Administrator

bk
Enclosure

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	4	-	6	0
CE -- Cerebrovascular Accidents	2	1	2	1
GC -- Gastrointestinal Catastrophes	2	-	2	0
GI -- Gastrointestinal Disease	-	-	-	-
GU -- Urologic Disease	1	-	1	-
GY -- Gynecologic Disease	-	-	-	-
HL -- Low Risk Heart Disease	-	1	0	1
HM -- Severe Chronic Heart Disease	2	-	3	0
HS -- Severe Acute Heart Disease	4	1	5	1
ME -- Metabolic/Electrolyte Disturbances	2	1	2	1
OP -- Orthopedic Disorders	-	-	-	-
PN -- Pulmonary Disease	6	-	7	0
RN -- Renal Disease	-	1	0	1
SE -- Sepsis	2	1	4	1
TR -- Severe Trauma	-	-	-	-
OP -- Ophthalmalogic Disease	-	-	-	-
UN -- Other Diagnoses	3	3	6	3
Total -- All Categories	28	9	38	9

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Carolina Medicorp Inc.

CMI
Carolina Medicorp Inc.

3333 Silas Creek Parkway
Winston-Salem, NC 27103

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Forsyth Memorial Hospital, #340014
Medical Park Hospital, #340148
Winston-Salem, N.C.

Dear Dr. Roper:

Thank you for the opportunity to respond to your letter of September 21, 1987 and the accompanying 1986 HCFA selected mortality tables.

Although there are no outlier statistics for our organization's two acute care hospitals, Forsyth Memorial Hospital and Medical Park Hospital, we continue to object to the use of a statistical methodology that ignores important variables, namely, any measure of severity of illness. We believe the lack of these variables cause the model to understate predicted mortality rates.

Specifically, in the example of Forsyth Memorial Hospital in Winston-Salem, N.C., 95 percent of all nursing home patients in our area are brought to this hospital, compared to only 60 percent of all Medicare patients. A well-publicized RAND Corporation study states that patients coming from nursing homes have the highest predicted death rates. That has been our experience as well. These are the frailest patients in our Medicare patient base; they are brought here because they are critically ill.

The selected mortality model does not include this important data.

Second, we believe our success in meeting HCFA's standards for admission of Medicare patients is working to our disadvantage in these tables. Forsyth Memorial Hospital has experienced few Peer Review Organization denials after Medicare patients have been admitted. Thus, our physicians are admitting only patients ill enough to pass stringent HCFA standards.

The selected mortality model does not include this important standard.

Third, our organization includes two acute care hospitals using the same medical staff. One hospital (Medical Park Hospital) specializes in elective surgery for selected patients. Consequently, it has very low mortality. The other hospital (Forsyth Memorial) provides a broad range of tertiary care emergency, surgical and medical services, and as mentioned above, receives virtually all critically ill nursing home patients in the area. As the same physicians are practicing in both hospitals, we believe data from both should be combined, especially now that they are owned by the same organization.

We agree with HCFA's position that on its own the information contained within the selected mortality tables do not constitute a measure of the quality of care at an individual hospital. We concur in your stated conclusion that you "do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals." In reality, however, is that not how uninformed readers will use this data?

Last, you state that HCFA will continue to develop and perfect other measures of quality, with the objective of issuing information which will allow the user to make judgments on the quality of care provided by individual institutions.

In our opinion, until the time when the information is meaningful, dissemination of incomplete and flawed information does not help individual consumers make informed decisions about their health care. It can only serve to create misunderstanding, mistrust and unhealthy concerns regarding hospital care among the elderly citizens of our nation.

Sincerely

Paul M. Wiles
President

Mercy Hospital

2001 Vail Avenue
Charlotte, North Carolina 28207

Phone (704) 379-5000

October 23, 1987

HCFA
Health Standards & Quality Bureau
P. O. Box 26684
Baltimore, Maryland 21207

RE: Hospital Mortality Information

Dear Sir:

The data provided by your organization regarding the subject captioned above has been reviewed and verified by our hospital. The following comments are submitted for your consideration:

1. 204/231 (88.3%) of the patients died at the hospital. The remaining 27/231 (11.7%) of the patients died post-discharge.

   46/231 (19.9%) of the patients died within 48 hours of admission which is indicative of the need to incorporate severity of illness measures in future data.

2. Two cases had principal diagnoses which were incorrect, that is, the diagnoses listed by HCFA were different than those actually assigned to the cases. In both cases the codes differed by one digit and appear to be due to re-keying errors on the part of hospital personnel. The diagnostic grouping of cases by HCFA was not affected by the errors in either case.

3. The use of a 30 day post-admission mortality rate results in the attribution to the hospital of deaths that are unrelated to the condition of the patient that was under treatment at the time of discharge or that resulted from the management of the patient at home or in a post-acute care facility.

4. We concur with the position of the AHA that this data is not, in and of itself, a measure of hospital performance and should in no means be used as the basis for judging the quality of care provided by different hospitals.

Sincerely yours,

Shannon K Newell, RRA

Shannon K. Newell, RRA
Director, Medical Record Department

MONTGOMERY MEMORIAL HOSPITAL, Inc.
Post Office Box 486, Troy, North Carolina 27371, Telephone 919/572-1301

October 23, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

With reference to your letter of September 21, and information submitted regarding mortality statistics for Medicare patients treated in our hospital for the year 1986, the following comments are offered for your consideration.

Data Verification

The data used by HCFA indicate that a total of 412 Medicare patients admitted to Montgomery Memorial Hospital died within 30 days of admission. Of these, 54 died while still a patient of the hospital while 6 died after discharge. Our own records indicate that 743 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficieries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Montgomery Memorial Hospital is correct. It is impossible to determine the percentage of the 6 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive remarks

In one of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate.

Unique Services Resulting in Higher than Average Mortality

The diagnostic category for which Montgomery Memorial Hospital had a higher than predicted mortality rate was "Cancer". Our primary service area does not have a Hospice facility or active Hospice program at present. For this reason, our facility provides care to terminally ill patients who can no longer be cared for at home or in an extended care facility. Many of these patients are terminal cancer patients.

Results of Preliminary Medical Record Review

Preliminary record review of those individuals whose names appear in the diagnostic category of "Cancer" shows that, of those persons listed, 53% had received treatment at another facility for the same condition. Chart review showed that 84% of the patients in the cancer category had received treatment for this condition on admissions prior to the final admission and were felt to be in the terminal stage of the disease at the time of the final admission.

We appreciate you sharing this with us and giving us the opportunity to comment.

Sincerely,

James L. Muse

James L. Muse
Administrator

/ew

cc: Kerry Anderson, R.N.
Director of Medical Records

Murphy Medical Center

2002 U. S. Highway 64 East

Murphy, North Carolina 28906

(704) 837-8161

Town of Murphy
Hospital Authority:

L. C. Turner
Chairman

John Carringer
Vice-Chairman

Bill Dyer, D.C.
Secretary

Tom O'Brien
Treasurer

Peter J. McKeon

Brian Mitchell, M.D.

Bill Hughes

Chief Executive Officer:

Richard F. Helmbold

Affiliations:

North Carolina Hospital Association

Voluntary Hospitals of America, Inc.

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

This letter is in response to your correspondence of September 21, 1987 regarding the forthcoming release of selected mortality information for acute care Medicare patients treated at this facility in 1986.

MMC is a small/rural healthcare facility in western North Carolina licensed for 50 acute care and 120 nursing home beds. Both category of beds are located within the same seven year old physical plant. Approximately 18% of the population served by MMC is composed of individuals 65 years or older. Accordingly, well over 60% of MMC's total acute care patient days are Medicare beneficiaries. This high volume of Medicare patient days coupled with MMC's relatively small size, translates into a strong possibility that mortality rates compiled using the 16 diagnostic categories can be very misleading.

While the Authority and Medical Staff do not oppose HCFA's publication of data, we do feel this information on hospital specific mortality should be released in a manner that will not mislead the public. In MMC's case, our 1986 statistical data resulted in actual mortality rates well within HCFA's predicted ranges in every diagnostic category. Yet during all of 1986 there were less than 10 patients classified in six of the sixteen diagnostic categories. Accordingly, when a small/rural hospital has such a small number of patients per category, an increase in one or two deaths can have the impact of exceeding the high range of predicted mortality rates.

"A Modern Healthcare Facility That Specializes In Caring"

For this reason we feel only the total "all causes" mortality rate should be publicized for healthcare facilities below 80-100 acute care beds. Publishment of individual diagnostic categories with such small numbers and widely varying yearly mortality rates caused by only a one or two death change from year to year will only lead to the public's confusion over the information to be released. Certainly any release of hospital specific mortality information must be accompanied by a strongly worded caution from HCFA warning the public that this information alone can not be used to interpret a particular facility's actual quality of healthcare delivery.

Further, it is recommended that the 30-day period after last hospital admission be reduced in the future to 15 days. A month is simply too long when dealing with an older patient population that has a higher risk of serious disease to associate the risk and mortality occurrence factor of that death with the delivery of healthcare provided by the discharging facility.

While it is our understanding that the basic data from which the mortality rates were computed is not to be released, the manner in which this data was presented is most misleading. Approximately two-thirds of the patients listed as having died within 30 days of discharge from MMC were in fact "transferred" to a skilled nursing home bed and provided adequate care for their terminal medical condition. Several additional patients were transferred to larger hospitals for specialized procedures not available locally that might have prolonged their lives. Lastly, of the remaining handful of patients who were actually discharged from MMC but died within 30 days, one-half had causes of deaths that were not related to the principle diagnosis upon admission. Yet, the raw data "paints" a much different picture that could incorrectly lead the public to the conclusion that patients are being discharged from hospitals before they are ready to return home.

In summary, for small/rural hospitals only the total "all causes" mortality rates should be released with a strong warning that these rates alone can not be used to solely reach a valid conclusion about a hospital's quality of patient care. The issues of the quality of patient care actually provided at a particular healthcare facility can best be determined by that facility's active Medical Staff.

Your favorable consideration of this recommendation is appreciated.

Sincerely,

Richard F. Helmbold

Richard F. Helmbold
Chief Executive Officer

a medical center ministering with skill and understanding

NORTH CAROLINA

BAPTIST HOSPITALS, Inc.

300 SOUTH HAWTHORNE ROAD, WINSTON-SALEM, NORTH CAROLINA 27103

John E. Lynch, Dr.P.A.
President

October 26, 1987

Health Care Financing Administration
Health Standards Quality Bureau
Hospital Mortality Data
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

Our comments on the Medicare Mortality Information are attached. The page titled "Comments on HCFA Mortality Data" is to be published with our data in the Federal Register. The page titled "Errors in Data" is included to help HCFA correct errors in the Medicare database.

Cordially,

John E Lynch

John E. Lynch

JEL/jbc

Attachment

a medical center ministering with skill and understanding

NORTH CAROLINA

BAPTIST HOSPITALS, Inc.

300 SOUTH HAWTHORNE ROAD, WINSTON-SALEM, NORTH CAROLINA 27103

Comments on HCFA Mortality Data

Data Verification

The data used by HCFA indicates 4,179 Medicare patients admitted to Hospital 340047 in 1986. This figure does not account for multiple admissions of the same patient. Our own records indicate 7,439 Medicare hospital admissions in 1986. HCFA's data indicate a total of 505 Medicare patients admitted to Hospital 340047 died within 30 days of admission. Our records indicate 502 Medicare patients admitted to our Hospital died within 30 days of admission. Three patients, listed as in-patients in our facility, were not admitted during 1986. In the HCFA data, 427 died while still in-patients and 78 died after being discharged. Our records show 431 patients died while in-patients and 71 died after being discharged.

Interpretive Remarks

Hospital 340047 is a tertiary referral center which is the primary hospital of a university school of medicine. Hospital 340047 is also designated as a Level I Trauma Center.

The actual mortality and predicted mortality rates were reviewed by the Executive Committee of the medical staff and Utilization Management. Specific categories which were near the upper range of the predicted mortality rates were reviewed in detail. Specific factors analyzed were comorbid conditions, age, transfers into the facility, severity of illness on admission (as measured using Medis-Groups), and a small number of patients spread over a large range of diagnoses, giving only a very few or no patients for a given diagnosis.

Utilization Management's analysis of those categories near the upper range with expected mortality rates indicated a high incidence of "significant comorbid conditions" and a high incidence of transfers into our facility. The MedisGroup severity of illness score on admission of the patients in the categories analyzed was significantly higher than the average patient's score. In at least one category, Severe Trauma, the average age (82) of the patients was significantly older than the average Medicare patient.

It is the consensus of Hospital 340047 and its Medical Staff that high quality patient care was provided to these patients.

a medical center ministering with skill and understanding

NORTH CAROLINA

BAPTIST HOSPITALS, Inc.

300 SOUTH HAWTHORNE ROAD, WINSTON-SALEM, NORTH CAROLINA 27103

NOTE: This page not to be included as part of comments.

ERRORS IN DATA

Data Field With Error Highlighted - Corrections Made

PT. ID NUMBER	SURNAME	AGE	DATE OF ADM.	DATE OF DISCHARGE	DATE OF DEATH
[redacted]	[redacted]	072	02/07/86	02/08/86	02/08/86
[redacted]	[redacted]	036	07/23/86	07/29/86	07/29/86
[redacted]	[redacted]	065	08/10/86	08/13/86	08/13/86
[redacted]	[redacted]	078	12/23/86	01/03/87	01/03/87
[redacted]	[redacted]	067	07/05/86	07/06/86	07/06/86
[redacted]	[redacted]	085	12/01/86	12/01/86	12/01/86
[redacted]	[redacted]	067	01/21/86	02/03/86	02/03/86
[redacted]	[redacted]	088	08/26/86	09/05/86	09/05/86
[redacted]	[redacted]	074	06/28/86	06/29/86	06/29/86

Patients Not Admitted To Hospital 340047 At Time Designated

[redacted]	[redacted]	075	05/19/86	05/23/86	05/23/86
[redacted]	[redacted]	066	06/17/86	06/29/86	06/29/86
[redacted]	[redacted]	067	04/15/86	04/27/86	04/27/86

*

Northern Hospital
of Surry County

We've Started A New Tradition In Hometown Care.

P.O. Box 1101 Mount Airy, North Carolina 27030 919 789-9541

October 21, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

RE: Comment on Medicare Mortality Data
Dated 9-21-87

The data you sent on 9-21-87 listing the deaths of Medicare patients treated at this hospital during 1986 has been reviewed, and comments are made below:

1. This mortality data does not measure the quality of care provided at this hospital. You are using a theoretical model which has neither been verified nor does it take into account severity of illness.

2. You have listed deaths which occurred within 30 days of admission to the hospital. This results in blaming the hospital for deaths that may not be related to the condition of the patient at discharge.

3. Your data listing is in error. It showed that 36 patients died after discharge from the hospital, but because you listed a prior admission date or wrong date of death for 7 patients, only 29 actually died post discharge. These 7 cases incorrectly listed were [redacted]

4. Of the 29 deaths occurring after discharge, 3 were transferred to other hospitals; 6 to SNF facilities; and 3 to Rest Homes; and all presumably died in these facilities. These 29 patients generally had chronic conditions with acute illnesses and the deaths were not unexpected.

5. Review of hospital deaths is a part of our ongoing Quality Assurance function and questions concerning management of a case are discussed with the physician (s) involved.

6. In none of the 16 diagnostic categories did the actual mortality exceed the "range of predicted mortality rates."

7. Our area has a population over 65 approaching 12% of the population, predicted to approach 20% by the year 2000, and we anticipate having a higher Medicare patient population than you might find elsewhere.

If you have any questions about these comments, we would be glad to receive them.

John K. Lockhart, FACHE
Administrator

JKL/ba

PARK
RIDGE
HOSPITAL
Affiliated with Adventist Health Systems/Sunbelt

October 9, 1987

William L. Roper, MD, Administrator
Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
PO Box 26684
Baltimore, MD 21207

RE: PARK RIDGE HOSPITAL, Fletcher, NC
Comments on Mortality Study
Medicare Provider # 34-0023

Dear Dr. Roper:

While our hospital statistics were well within your predicted range, we wish to add the following information to be published with our data:

"Henderson County is a popular year around retirement area and many Florida residents spend the summer in Hendersonville as well. Medicare patients represent approximately 55% of the patients treated at Park Ridge Hospital."

Sincerely,

R.W. Burchard

Robert W. Burchard
President

RB/jp

P.O. Box 1569, Fletcher, N.C. 28732/(704) 684-8501

200 Hawthorne Lane
Post Office Box 33549
Charlotte, NC 28233-3549
704/ 371-4000

Presbyterian Hospital

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration on
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: 1986 Mortality Data
Presbyterian Hospital

Medicare Provider Number 340053

Dear Dr. Roper:

Presbyterian Hospital appreciates the opportunity to review the 1986 mortality data on Medicare beneficiaries prior to the public disclosure. We are unsure of the validity of your statistical model. There is also a concern that the data is categorized by the principal diagnosis which caused the admission rather than by the cause of death. However, the overall data review process has been very meaningful.

This hospital, like most hospitals, has on-going programs to review death records, both as individual occurrences and in aggregate studies. No disturbing trends have been identified in the past. The HCFA data provides some additional opportunities to insure that medical care and discharge plans are appropriate.

We have begun to review discharge plans of those patients who expired within thirty days of discharge. Special attention will be paid to those whose deaths occurred one to two days following discharge. This is a group of patients not previously identifiable by us.

A study is also underway to determine whether management in four categories whose rates were on the high end of the predictable range. Preliminary results show that the urology category is misleading. Many of these patients have chronic diseases and are debilitated and infirm. The cause of admission is a urinary tract infection but the care of the infection and all other chronic conditions is managed by medical specialists rather than a urologist.

The two other categories identified are renal disease and sepsis. The sample size is very small (30 - 33) but we will verify that care was appropriate. Pulmonary disease is the final category. There are a large number of chronic disease patient in this geographic area. There are eight physicians on our active staff who specialize in pulmonary medicine. A study is underway to make sure all deaths in this category were unavoidable.

Data discrepancies were identified in seventeen patients. A list is attached for your information.

We are pleased that all mortality rates at Presbyterian Hospital were within the predicted range. We will continue to strive for and achieve quality patient care.

Sincerely,

Paul F. Betzold

Paul F. Betzold
Executive Vice President

PFB:cr

1986 MORTALITY DATA

PATIENT I.D.	SURNAME	DATE OF ADMISSION	DATE OF DISCHARGE	MEDICAL RECORD	
[redacted]	[redacted]	8/19/86	9/17/86	254287	527 Not principal procedure
[redacted]	[redacted]	2/19/86	2/28/86	225355	Dates wrong
[redacted]	[redacted]	12/18/86	12/22/86	246398	185 Not principal diagnosis
[redacted]	[redacted]	12/19/86	12/23/86	274053	431 Not principal diagnosis
[redacted]	[redacted]	1/17/86	2/4/86	219323	Incorrect date of death
[redacted]	[redacted]	1/25/86	1/26/86	220633	436 Not principal diagnosis
[redacted]	[redacted]	6/1/86	6/14/86	112524	5997 Procedure code missing
[redacted]	[redacted]	7/3/86	7/14/86	225369	Procedure codes missing
[redacted]	[redacted]	11/15/86	12/1/86	269006	4280 Not principal diagnosis
[redacted]	[redacted]	9/12/86	9/18/86	223217	Incorrect date of death
					Patient listed twice on report
[redacted]	[redacted]	2/19/86	2/10/86	040318	Incorrect date of discharge and death
[redacted]	[redacted]	7/16/86	7/17/86	042666	Incorrect date of discharge
[redacted]	[redacted]	8/23/86	8/29/86	150210	Incorrect date of discharge
[redacted]	[redacted]	11/25/86	12/2/86	263846	Incorrect date of discharge
[redacted]	[redacted]	3/5/86	3/27/86	088879	Incorrect date of discharge
[redacted]	[redacted]	4/8/86	4/21/86	232036	Principal diagnosis wrong
[redacted]	[redacted]	9/16/86	9/22/86	190771	Incorrect date of death

0015u.26

REX HOSPITAL

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Please consider the following a summary analysis of errors found in the case listing of Medicare mortalities provided by you. The appropriate changes have been made on the copy which is attached. In addition, we have attached our response to be published with the corrected data in December.

1. No record of patient ever having been admitted to hospital;
   [redacted] 12/26/85 1/3/86 1/10/86 7908

2. Still alive more than thirty days after discharge;
   [redacted] 086 F 1/2/86 1/15/86 1/15/86 4102
   (alive at present)

3. Died at other hospitals;

   A. [redacted] 5/25/86-5/25/86 6/7/86 436
   Wake Medical Center, Raleigh, North Carolina

   B. [redacted] 7/18/86 7/30/86 5164
   Womack Army Hospital, Fayetteville, North Carolina

   C. [redacted] F 4/7/86 4/11/86 4/21/86 2899
   4131
   Wake Medical Center, Raleigh, North Carolina

   D. [redacted] M 12/13/86 12/23/86 12/28/86
   4101
   Raleigh Community Hospital, Raleigh, North Carolina

Sincerely,

Kenneth F. Wiblitzhouser
Vice President/Human Resources

KFW/ksg

Attachment

John R. Willis, President
4420 Lake Boone Trail, Raleigh, North Carolina 27607 (919) 783-3111

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

REX HOSPITAL

Rex Hospital supports consumer access to valid and useful information published by HCFA with the caveat that the public is clearly informed that statistics, be they high rates or low rates of mortality, do not by themselves necessarily indicate a hospital's quality of care. Although Rex did not exceed the predicted mortality ranges during 1986, we realize that mortality rates can change drastically over time given the severity of illness of its patients and other factors which may be unpredictable and uncontrollable. We do not take comfort in the mortality rates reported for our hospital as a predictor of high quality. We prefer to use these statistics as a tool to enhance our ongoing quality management efforts -- nothing more.

The quality of care provided at Rex Hospital is the primary concern of the Board of Trustees, Administration and the Medical Staff. Certain patient outcomes (including death) are routinely monitored and reviewed by physicians in the appropriate clinical departments. Determinations are made concerning quality and appropriateness of care received by the patient, and if a variance is noted, appropriate action is taken immediately.

It is important for the reader to note that Rex is a cancer referral center, having performed 14,000 outpatient and 2,000 inpatient radiation treatments in the last twelve (12) months. This is in addition to cancer surgery and chemotherapy administration, which combined, accounts for the fact that 27% of all Medicare patient deaths in 1986 were due to cancer.

A detailed review of all Medicare patient records identified to Rex in the sample provided by HCFA revealed that:

- one (1) patient was still alive
- one (1) patient had not been admitted to Rex Hospital
- four (4) patients had died at other hospitals
- three (3) patients died at home
- fourteen (14) patients died in an extended care facility
- four (4) patients died in the Rex Emergency Department
- five (5) patients reported as dying after departing Rex could not be verified by us.
- 72% of all deaths reported were "no code" indicating a high level of severity of illness
- 62% of all deaths reported were for patients admitted through the Emergency Department
- 26% were admitted from nursing homes
- 4% were admitted from another facility
- 47% had complicating comorbidities
- The average age of these patients was 77.

John R. Willis, President
4420 Lake Boone Trail, Raleigh, North Carolina 27607 (919) 783-3111

HOSPITAL = 340114 REX HOSP RALEIGH NC

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	~~2,975~~ 2,969	11 %	10 TO 16 %
CA - CANCER	307	29 %	20 TO 35 %
CE - CEREBROVASCULAR ACCIDENTS	~~106~~ 105	~~15 %~~ 14.2 %	18 TO 36 %
EY - OPHTHALMOLOGIC DISEASE	40	0 %	0 TO 37 %
GC - GASTROINTESTINAL CATASTROPHES	70	10 %	10 TO 31 %
GI - GASTROINTESTINAL DISEASE	344	6 %	3 TO 9 %
GU - UROLOGIC DISEASE	107	7 %	2 TO 13 %
GY - GYNECOLOGIC DISEASE	36	0 %	0 TO 33 %
HL - LOW-RISK HEART DISEASE	227	3 %	3 TO 9 %
HM - SEVERE CHRONIC HEART DISEASE	~~147~~ 146	~~20 %~~ 19.1 %	16 TO 31 %
HS - SEVERE ACUTE HEART DISEASE	~~125~~ 123	~~32 %~~ 30.8 %	28 TO 47 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	44	7 %	9 TO 36 %
OP - ORTHOPEDIC DISORDERS	167	2 %	0 TO 6 %
PN - PULMONARY DISEASE	252	19 %	14 TO 27 %
RN - RENAL DISEASE	18	22 %	7 TO 51 %
SE - SEPSIS	32	34 %	21 TO 56 %
TR - SEVERE TRAUMA	95	6 %	4 TO 17 %

ROANOKE-CHOWAN HOSPITAL

P. O. Box 1385
Ahoskie, N. C. 27910
Telephone: (919) 332-8121

October 9, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Re: Medicare Provider No. 340099

Dear Dr. Roper:

Thank you for the opportunity to comment on the selected mortality information for Medicare patients admitted to Roanoke-Chowan Hospital in 1986.

We have carefully reviewed this information and found two discrepancies as follows:

1. Patient [redacted] died on October 16, 1986, rather than on October 31, 1986, as shown in your records.

2. Patient [redacted] shown as expiring on December 19, 1986, was actually transferred to a SNF on that date and later discharged alive by that facility. We performed a cystoscopy in April 1987. It is apparent she was alive and relatively well at that time. To paraphrase Mark Twain - rumors of her death in December 1986 are exaggerated. Your data in this case is incorrect.

We would like to point out that mortality data is but one of many quality indicators of a hospital. Those data need to be considered in context with many other factors.

Roanoke-Chowan Hospital is a community, not-for-profit hospital that accepts, without consideration of economic factors, any patient who requests care. This includes a disproportionate share of low income, often complete charity, patients. Many of these patients have no regular family physician or prior medical care.

This Hospital is the only hospital in a rural, four-county area serving 85,000 people that is accredited by the Joint Commission on Accreditation of Health Care Organizations. We devote a considerable amount of effort to organized quality assurance programs designed to monitor the quality of patient care.

Sincerely yours,

Peter N. Geilich
President

PNG:hv

ROWAN MEMORIAL HOSPITAL

October 21; 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

It is the strong feeling of this institution that the release of hospital specific mortality data to the general public can only serve to confuse an already complex problem in the minds of the patients we serve. To do so is a disservice to people who trust their government to act in a responsible and truthful way.

We have completed a careful review of the hospital-specific mortality data for Medicare patients confined to our hospital during 1986. We are pleased to note that your statistics indicate that our outcomes fell within the predicted mortality rates for all diagnostic categories. In studying the data, we did realize that three deaths were inaccurately reported: one patient is still alive, a second expired at another institution, and a third patient's death is reported twice on the report from your office.

Our specific comments, however, do not relate to the results of our data. Rather, we wish to object to the Administration's decision to report mortality data at all. We believe that the premise that the number of deaths which occur in an institution is a reasonable indicator of the quality of medical care rendered in that institution is unsound. Many critical factors are ignored under such a premise. The institution's orientation as a teaching hospital or non-teaching hospital, the morbidity trends of the Medicare population in the hospital's service area, and the acuity of illness of a particular hospital's patient population are all factors which could explain a hospital's mortality rate far better than a nebulous reference to quality.

612 MOCKSVILLE AVENUE • SALISBURY, NORTH CAROLINA 28144 • (704) 638-1000

I hope that you will consider these comments in the constructive and cooperative manner in which they are intended.

Sincerely,

M. E. Bullard

M. E. Bullard
Director

MEB:jl

c: RMH Board of Trustees
Dr. L. H. Robertson, Jr. - President of Medical Staff
Dr. F. U. Goss - Chairman, Quality Assurance Committee
Administrative Council
North Carolina Hospital Association
American Hospital Association

SOUTHEASTERN
GENERAL HOSPITAL

Medicare Provider No. 34-0050

COMMENTS ON HCFA MORTALITY DATA RELEASE

Southeastern General Hospital is a private, not-for-profit hospital in rural southeastern, N.C. providing care both as a local community facility and a rural referral center. We are the only hospital located in and serving a county with a population of approximately 100,000 people.

We welcome the opportunity to review and comment on this mortality data release. As Dr. Roper has stated these data do not reflect a complete measure of the quality of care at an individual hospital. We agree, however, that this study can be useful not only for research but as a means to assist us in our continued self-assessment as we strive toward excellence. In our review of the data we have found very few errors and these have been communicated to the HCFA separately as our contribution toward their efforts to insure validity.

The sample selected for this study represents approximately 18% of admissions to Southeastern General Hospital during this time period. The sample, however, is skewed toward a specific population, i.e. elderly, terminally ill patients. HCFA predicted that the diagnostic categories defined would encompass approximately 70% of the admissions and 80% of the deaths in this sample. In our hospital these were 68% and 77% respectively which tends to verify the prediction.

In reviewing the individual categories these mortality data appear to be more a reflection of the patient population and the general character of our hospital than a measure of effectiveness of treatment.

The group of patients in the category of Cancer deaths were found to have been admitted at a stage of their disease which was beyond the limits of treatment. Review of the principal procedures in this group discloses that only one patient was treatable by what might be called definitive therapy. [redacted]. When, as might be expected, her post-operative course became complicated, her family requested no further treatment. The principal procedures of the rest of the patients were only diagnostic (medical imaging, endoscopy or biopsy) or pallative (colostomy) or supportive (respiratory therapy). These all represent patients in the terminal stages of their disease.

Similarly, while Urologic Disease commonly is identified as a surgical specialty, of the patients whose principal diagnosis placed them statistically within this category, one actually died with prostatic carcinoma and should probably have been included in the Cancer category. The other four all died primarily of underlying degenerative vascular disease with related renal (kidney) manifestations. These patients again represent terminal stages of disease.

300 WEST 27TH STREET
P.O. BOX 1408
LUMBERTON, NORTH CAROLINA 28359
(919) 738-6444

Among the patients who died with Severe Acute Heart Disease, nineteen of forty-three patients were seventy-nine years of age or older. Thirty-two of these patients had acute myocardial infarction. Ten of these died within less than twenty-four hours. Of the remaining ten patients in this Category seven died in less than forty-eight hours, five with cardiac arrest, three with ventricular arrythmias and two with ruptured aneurysms. Again, these cases represent terminal events in elderly patients.

Nearly half (121:257) of the deaths in the High Risk group of categories are represented by cancer, stroke, and heart disease. These are frequent terminal events in elderly people. These terminal events characteristically are managed in a local community hospital. We recognize our role as a community hospital and interpret these data to indicate that we are fulfilling that role.

In the other categories which are more reflective of our medical treatment capabilities in our role as a rural referral center, we also take pride. These tend to represent illnesses which are more amenable to treatment either as chronic or incidental disease processes rather than presenting as terminal events. This is evident even when this elderly, generally high risk population had surgical treatment. Here our success rate is reflected in relatively low mortality rates. In the management of severe trauma, generally unrelated to any pre-existing disease process, our success rate is noteworthy. Fifty-six of fifty-eight elderly patients who sustained severe trauma were saved and restored. Only two women with hip fractures, one, eighty-four and the other ninety-eight years of age succumbed to the complications of their injuries.

We wish to commend HCFA for the steps taken to improve the process of this data release. As stated, these data do not allow statistical comparisons among hospitals as to the effectiveness of treatment. While the exercise is less than definitive in identifying the quality of medical care delivered, it does provide a reflection of the activity within our hospital and represents a substantial step in making available to the public objective accurate information upon which they may make decisions.

Howard Strawcutter, M.D.,
Vice President, Medical Affairs

Stokes-Reynolds Memorial Hospital
DANBURY, NORTH CAROLINA 27016
TELEPHONE 919-593-2831

SANDRA D. PRIDDY
ADMINISTRATOR

October 5, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Stokes-Reynolds Memorial Hospital - 340019

The attached mortality information is correct with the exception of patient [redacted], correct date of death is 02/11/86. The front sheet of the medical record is attached for your review.

Thank you for sharing this information with us prior to public release.

Sincerely,

Sandra D Priddy

Sandra D. Priddy
Administrator

SDP:acb

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

THE BRUNSWICK
HOSPITAL

October 26, 1978

Department of Health & Human Services
Health Care Financing Administration
Health Standards and Quality Bureau
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Sirs:

Thank you for the opportunity to review and comment on your statistics regarding the mortality information about Medicare patients at The Brunswick Hospital.

There is a one key statistical discrepancy that HCFA has based its results upon that needs to be clarified. That statistic is the total number of cases HCFA utilized in its calculations. Since HCFA only used the last hospital admission of the year for all Medicare beneficiaries in 1986, HCFA failed to give us credit for all of the multiple admissions for each of these patients during 1986.

Statistically, HCFA states that The Brunswick Hospital had 246 cases during 1986 resulting in a 15% actual mortality rate for Medicare beneficiaries. While the 15% actual mortality rate still falls within the range of predicted mortality rates, we must further clarify HCFA's data.

Our records indicate The Brunswick Hospital had 430 Medicare beneficiary admissions during 1986 which results in an 8.8% actual mortality rate for Medicare beneficiaries.

Other areas of clarification are as follows:

1. HCFA data was based upon the principle diagnosis and not the cause of death.

U.S. Highway 17 South
Post Office Box 139
Supply, North Carolina 28462
Telephone (919) 754-8121

An Affiliate of
HEALTHTRUST
INC. *The Hospital Company*

2. The Brunswick Hospital offers Hospice care through Lower Cape Fear Hospice, Inc. and a skilled nursing facility due to the absence of a nursing home offering skilled nursing care in Brunswick County.

3. 100% of deaths are reviewed through a Hospital Mortality Review Process and none of the deaths were found to be unexpected outcomes.

4. We agree with HCFA that this information on its own is not a complete measure of the quality of care at an individual hospital.

The Brunswick Hospital is very proud of its quality standards of care provided to the people of Brunswick County.

Sincerely,

John A. Marshall

John A. Marshall
Administrator

JAM/cdl

THE MOSES H. CONE MEMORIAL HOSPITAL
GREENSBORO, NORTH CAROLINA 27401-1020

EXECUTIVE OFFICES

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Finance Administration
Hubert H. Humphrey Building
Room 309-G
200 Independence Avenue, SW
Washington, D.C. 20201

Re: Medicare Mortality Data Release
Provider #: 34-0091

Dear Dr. Roper:

Thank you for the opportunity to comment on the Medicare Mortality Data for 1986. We have verified the information provided, and in general believe the data to be accurate. Further, we appreciate HCFA's use of a methodology which incorporates each patient's diagnosis thereby creating essentially a "customized" range of predicted mortality rates for each institution. Our hospital provides high quality patient care, and this, to some extent, is verified by the fact that our mortality rates fall within the predicted ranges.

However, we have serious concerns with the limits of this methodology, and believe that this data alone should not be used as a comprehensive measure of quality of care, but instead be used solely as a mechanism for providing hospitals information which might help them identify areas requiring further review. We believe quality assessments can only be made after a careful review of the information contained in each patient's medical record. For example, the HFCA mortality data furnished does not distinguish the severity of illness involved nor the preexisting general condition of the patient. As a result, significant factors in anticipating outcome are essentially ignored by the data. Consequently, our hospital utilizes a peer review (physician to physician) methodology for clinical review. All mortalities are routinely reviewed by appropriate peer review committees and any opportunities to improve the quality of care are identified and communicated to our Medical Staff. It should be noted that mortality data is only one of the many criteria we routinely use as a monitoring mechanism to assure that quality care is provided.

These mortality rates cannot and should not be used to compare institutions. Each hospital's patient population is unique. Additionally, each hospital has a unique role within the health care delivery system of its community. The following factors should be considered when reviewing our hospital's data.

The Moses H. Cone Memorial Hospital is the tertiary health care provider of our community, serving as the referral hospital for surrounding community hospitals. We receive patients who are at "higher risk" (significantly more complex conditions) than most other community providers. Specifically, we are the primary hospital provider in our community for the following tertiary services which has an impact on our mortality rates:

- Emergency Department designated as a Level II Trauma Center.
- Comprehensive Cardiac Services including; open heart surgery, cardiac catheterization and angioplasty programs.
- Inpatient Hemodialysis Services.
- Principle provider of services to the indigent population whose general conditions, many times, places them in a higher risk situation.
- Other high risk services such as Neurosurgery.
- Comprehensive Oncology program including all methods of therapy as well as a specialized program for the terminally ill (Hospice Program). In reviewing specific cases, we noted that many of the patient records of cancer related deaths referenced the fact that the patient and physician were aware of a patient's terminal prognosis upon admission.

These are but a few of the reasons why we caution the regulatory agencies and general public to be aware of the limitations of this mortality data when attempting to draw conclusions about the quality of patient care in any given institution. We believe that the work currently being done by the Joint Commission on Accreditation of Hospitals, The American Hospital Association, and other professional organizations to develop methods of evaluating the quality of patient care in hospitals will ultimately provide for a more appropriate, meaningful, and accurate means by which the quality of health care services may be evaluated by all concerned.

Again, thank you for the opportunity to comment on this information.

Cordially,

Dennis R. Barry, President

DRB:ddd

University Memorial Hospital
A Facility of The Charlotte-Mecklenburg Hospital Authority

Post Office Box 26015
W.T. Harris Blvd. at U.S. 29
Charlotte, North Carolina 28221
Telephone 704 547-9200

Joe Gribbin
Administrator

October 23, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Attached you will find University Memorial Hospital's (provider number 34-0166) response to HCFA's mortality information for 1986. I would like to take this opportunity to thank you for allowing us to review and respond to the information.

If you have any questions or I can be of further assistance in reviewing this information, please call me at (704) 547-9280.

Respectfully submitted,

Joseph J. Gribbin

Joseph J. Gribbin
Adminstrator

JJG/r
19.3
Attachment

University Memorial Hospital
A Facility of The Charlotte-Mecklenburg Hospital Authority

Post Office Box 26015
W.T. Harris Blvd. at U.S. 29
Charlotte, North Carolina 28221
Telephone 704 547-9200

Joe Gribbin
Administrator

October 23, 1987

Medicare Provider # 34-0166

University Memorial Hospital is a 130-bed community hospital that provides a full range of services to its patients. While University Memorial Hospital's mortality percentages fall within HCFA's "predicted range of the percent of patients who would have been expected to die", we do not believe that this information is in any way a complete measure of the quality of care at an individual hospital. University Memorial Hospital's Medical Staff spends a great deal of time and effort assessing patient care on a concurrent basis which includes a careful review of mortalities as well as many other important aspects to assure a high quality of patient care. Thus, we feel that HCFA's confidence of using only mortality information to reflect the Hospital's quality of care disconcerting.

The report provided by HCFA indicated that until they "have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of this information, by itself, to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals" (William L. Roper, M.D.). The Voluntary Hospitals of America, Inc. have also emphasized that certain institutions which provide a broad range of services for a large geographical area will provide care for patients with much more serious conditions than the average community hospital. The total lack of sensitivity of HCFA's predictive model to these factors is most pronounced in regards to tertiary care institutions and major teaching centers but is applicable to a lesser extent with community hospitals who serve specific community needs as well. The current unwillingness to adjust for intensity or severity of patient illness provides misleading information, subject to misinterpretation.

As requested by HCFA, we have attempted to validate as much of the information as possible. We have, however, found this information difficult to replicate as the methodology used by HCFA is different from the widely accepted way mortality rates have historically been calculated. In addition, we were not provided with the names of patients to validate those cared for at University Memorial Hospital, but only the names of those who died here. The HCFA report of 178 cases with an average mortality rate of 11% represents the number of Medicare beneficiaries whose last discharge in 1986 was from University Memorial Hosptial. This data does not include the number of times a patient was treated at University Memorial Hospital as each patient, regardless of the number of admissions, counts as only one case. Statistics kept by University Memorial Hospital indicate that during 1986 there were 266 Medicare patients discharged with a mortality rate of 7%.

Additionally, at the beginning of 1986, University Memorial Hospital had been in operation seven full months. The total number of Medicare patients seen in any individual diagnosis group in our emerging hospital during 1986 very well would not be considered large enough to render the results statistically valid. In fact, of the fourteen specific diagnosis groups presented nine of these calculations were based upon fewer than ten Medicare cases. The inherent limitations of this potentially aberrant data are substantial.

University Memorial Hospital appreciates the opportunity to present our review of the HCFA mortality information as we welcome any opportunity to improve patient care. However, again we must express our concern over the publication of information which only measures mortality as reflective of a hospital's quality of performance and statistics which we are unable to accurately validate.

Valdese General Hospital

Robert H. Luse
President

October 27, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Re: Medicare Provider #340055

Dear Dr. Roper:

Thank you for the opportunity to reply to the mortality information about Medicare patients treated in our hospital in 1986. The issue of quality of care is of the utmost concern to our hospital's governing board, management and medical staff. As a result of this concern, all mortalities are carefully reviewed by our medical staff as an on-going quality appropriate assessment.

After carefully reviewing the presented statistics we concentrated the reviews in the Diagnostic Category of HM-Severe Chronic Heart Disease. The statistics show 40 cases with 15 mortalities with an actual mortality rate of 38% and a range of predicted mortality rates of 10 to 35%. In our second review we found the average age (of the 15 mortalities) to be 79.9 years. All mortalities were in-patients with long histories of heart disease and all had contributing complications thereby creating situations conducive to fatal outcomes.

Our hospital is most fortunate to have a cardiologist on staff which is unique among hospitals of our size. Because of this we have heart patients that are of a higher risk and of increased severity of illness than normally expected.

We have also noted that in working strictly with statistical data, that smaller numbers result in larger percentages.

We appreciate the concern shown by HCFA in the interest of Medicare patients and are always interested in ways to enhance our quality of care.

Sincerely,

Lloyd Wallace

Lloyd E. Wallace
Vice-President, Clinical Services

P.O Box 700
Valdese, North Carolina 28690
(704) 874-2251

Wayne Memorial Hospital, Inc.

Post Office Box 8001 • 2700 Wayne Memorial Drive
Goldsboro, North Carolina 27530
919 / 736-1110

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Attention: HSQ-148-GNC
Post Office Box 26676
Baltimore, Maryland 21201

Dear Dr. Roper:

Attached please find our response to the HCFA Mortality Data received from you in late September. We appreciate your using our comments in the release of this mortality data which you have indicated will occur in December, 1987.

Thank you for including our comments.

Sincerely,

Preston N. Comeaux III

Preston N. Comeaux, III
Senior Vice President - Operations

PNC:rck

Enclosure

Comments on the HCFA Mortality Data

Data Verification

The data used by the Health Care Financing Administration (HCFA) indicate that a total of 271 Medicare patients admitted to Wayne Memorial Hospital (340010 hospital) died within 30 days of admission. Of these, 225 died while still a patient of the hospital while 46 died after discharge. Our own records on the 271, indicate that 234 Medicare patients died within 30 days of admission while still an inpatient, and 37 were still alive at the time of discharge. It is impossible for us to determine how many of the 37 patients who were discharged alive did die within 30 days of admission because information concerning death after discharge is not included in a patient's medical record. HCFA data also showed that 1,801 Medicare admissions occurred in 1986. Our own records indicate that 2,847 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to the hospital.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in HCFA's analysis.

Interpretive Remarks

HCFA has developed a statistical model for predicting mortality rates for different illnesses with hospitalization of Medicare patients. At best, the model offers crude estimates of the expected risk of death. For example, statisticians have yet to develop reliable and valid measures to factor in complex issues such as the severity of an illness of each patient.

HCFA's data are not a measure of the quality of care at a hospital. The mortality predictors are intended as a guide to hospitals to indicate services where quality might be a problem and deserve a more detailed review. Consequently, HCFA's administrator, William Roper, advises that his agency, "... cannot and does not recommend use of this information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals." *(See Roper's September letter to hospitals on the model, page two.)*

At Wayne Memorial Hospital analysis and review of quality of care remains an ongoing part of the hospital's treatment of any patient. All deaths in the hospital are reviewed in the quality assurance program with the medical staff. Equally important is the concurrent review process which evaluates during hospitalization many important aspects of quality patient care.

HCFA's review of the 1986 Medicare mortality data on Wayne Memorial Hospital shows the incidence of death within 30 days of hospitalization from cancer (38%) was one percentage point above the range of predicted mortality for those cases (19% to 37%). This deviation could be due to pure statistical chance.

There are several other factors that could contribute to Wayne Memorial Hospital's mortality rate for cancer being one percentage point above HCFA's predicted rate. One factor is the probable greater severity of the Medicare cancer cases admitted at Wayne Memorial Hospital versus the average hospital patient mix used in HCFA's model.

One reason for this possible deviation is the fact Wayne Memorial Hospital serves as a five-county referral center in cancer treatment. But, HCFA's model does not address the issue of severity. According to Wayne Memorial Hospital's records, severity is probably a major factor in cancer mortality rates. Physicians in neighboring hospitals often refer their more serious cancer patients to our oncologist (cancer specialist) for evaluation and treatment here.

In summary, HCFA openly acknowledges the limitations of the data, the need for continued refinement and the fact that the data cannot be used directly as a measure of hospital performance. The HCFA statistical model raises important questions but does not answer them. Quality judgments can only be made after thoroughly reviewing all the information contained in patients' medical records. Each hospital's quality assurance program and medical staff should do this type of review which for decades has been standard practice at Wayne Memorial Hospital.

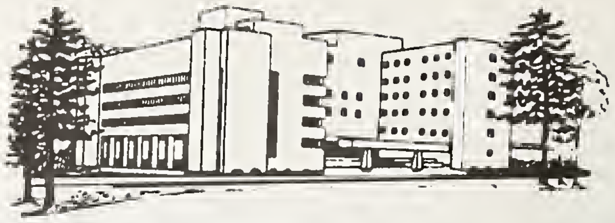
ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	49	7	50	6
CE -- Cerebrovascular Accidents	26	3	26	3
GC -- Gastrointestinal Catastrophes	5	1	6	0
GI -- Gastrointestinal Disease	7	2	7	2
GU -- Urologic Disease	5	3	5	3
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	5	2	6	1
HM -- Severe Chronic Heart Disease	18	6	19	5
HS -- Severe Acute Heart Disease	35	6	37	4
ME -- Metabolic/Electrolyte Disturbances	4	0	4	0
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	33	8	34	7
RN -- Renal Disease	6	0	6	0
SE -- Sepsis	7	1	7	1
TR -- Severe Trauma	2	1	2	1
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	23	6	25	4
Total -- All Categories	225	46	234	37

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Wesley Long Community Hospital, Inc.



October 21, 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D. C. 20201

Dear Dr. Roper:

We have reviewed the information presented by HCFA about Medicare patients treated at Wesley Long Community Hospital, Hospital ID 340125, in 1986. Some errors were found in HCFA's data and we have provided the corrections below. While Wesley Long is well within the ranges identified by HCFA as acceptable, we cannot endorse the use of mortality data alone as an indicator of quality care. An appropriate assessment of hospital performance is dependent upon many variables and requires a look at many quality indicators of which mortality is but one.

We have identified the following corrections that need to be made to the HCFA data:

PATIENT ID NUMBER	INCORRECT DATA	CORRECT DATA
[redacted]	Prin. Diagnosis: 2754	Prin. Diagnosis: 486
[redacted]	Prin. Procedure: 9202	Prin. Procedure: 9205
[redacted]	Date of Death: 4/10/86	Date of Death: 3/19/86
[redacted]	Prin. Diagnosis: 42781	Prin. Diagnosis: 4280

As stated above, while Wesley Long is presented favorably by HCFA's mortality data, we feel quality of care cannot be measured by mortality data alone. Our belief in this is reflected in the comprehensiveness of our own quality assurance program.

We are a non-profit community hospital licensed for 341 acute care beds. We serve a large segment of the Medicare population in Greensboro. Our Quality Assurance Program is coordinated through two departments: Quality Assurance and Risk Management. Medical Staff quality assurance in our facility is supported through the efforts of a rigorous peer review process. Following patient discharge, the medical record is screened against a wide array of quality indicators. Records identified through applying these screens are presented to a medical staff peer review committee for further review. Any reported incidents identified by Risk Management are also submitted for physician review. All deaths are processed through several levels of review, and those deaths which were not clearly anticipated (e.g. patients not diagnosed as having a terminal illness) are submitted for physician scrutiny. The chiefs of each medical department sit on their respective peer review committees and subsequently report any actions or identified problems to their staff members each month.

The Quality Assurance program has the support and cooperation of Hospital Administration, the Medical Staff and the Board of Trustees. Each hospital and Medical Staff department provides a report of the results of monitoring activities on a quarterly basis to the Quality Assurance Committee. Areas identified as treating high risk patients have individualized quality assurance programs tailored to monitor the specialized patient care provided in these areas.

In summary, the Quality Assurance program we have implemented examines a wide variety of indicators to insure that Wesley Long provides quality care. Mortality rates cannot stand alone as an indicator of quality.

Sincerely yours,

John A. Schrull
Director

JAS/dmp

North Dakota

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ASHLEY MEDICAL CENTER ASHLEY ND 58413	ND-7 *	121	9	8-22	7	14	10-72	4	0	4-77	4	0	1-74	4	50	4-78	5	60	13-84	3	33	4-84	14	14	10-55
CARRINGTON HOSPITAL CARRINGTON ND 58421	ND-8 *	235	7	8-19	5	0	2-68	10	20	9-61	4	25	1-74	12	8	7-54	7	86	20-83	9	11	4-56	40	5	10-36
CAVALIER COUNTY MEM HOSP LANGDON ND 58249	ND-9 *	200	12	11-23	7	43	12-75	7	29	6-66	8	13	3-58	15	27	8-50	5	60	13-84	3	0	0-83	38	13	13-42
CITY HOSPITAL NEW ROCKFORD ND 58356	ND-10 *	144	17	8-21	5	60	6-74	7	57	10-72	8	0	3-57	3	33	2-82	3	67	6-87	9	0	4-56	24	29	8-41
COMMUNITY HOSP IN NELSON C MCVILLE ND 58254	ND-11 *	152	15	9-22	1	0	1-97	5	20	8-77	2	0	0-91	17	35	9-50	3	33	8-89	8	38	5-62	27	22	13-47
COMMUNITY MEMORIAL HOSP HETTINGER ND 58639	ND-12 *	478	13	9-18	30	27	10-42	14	21	13-59	11	0	2-47	21	43	9-45	17	59	19-62	21	10	6-41	56	9	12-35
COMMUNITY MEMORIAL HOSP LISBON ND 58054	ND-13 *	271	12	8-18	7	29	8-69	3	0	4-85	4	0	1-74	17	35	9-49	10	40	20-76	6	0	1-63	40	18	10-36
DAKOTA HOSPITAL FARGO ND 58102	ND-14 *	1647	9	7-13	128	20	17-36	40	20	15-42	32	19	11-41	37	30	13-41	38	42	24-55	12	17	4-49	68	22	14-35
DICKEY COUNTY MEM HOSP ELLENDALE ND 58436	ND-15	135	20	11-25	4	75	10-85	6	33	5-69	6	17	2-64	7	14	7-67	7	71	13-76	5	20	2-69	25	40	11-45
GARRISON MEM HOSP GARRISON ND 58540	ND-16	97	9	9-25	4	50	12-87	3	0	3-83	3	0	5-85	13	23	8-54	.	.		3	0	2-82	10	10	7-59
GOLDEN VALLEY CO HOSP BEACH ND 58621	ND-17 *	27	0	2-28	.	.		1	0	0-97	2	0	0-90	.	.		.	.		.	.		4	0	2-75
GOOD SAMARITAN HOSP RUGBY ND 58368	ND-18 *	336	18	12-21	17	41	11-53	18	28	16-58	9	56	3-54	28	46	13-46	28	25	24-60	10	0	3-52	37	27	11-39
GRIGGS COUNTY HOSPITAL COOPERSTOWN ND 58425	ND-19 *	114	8	7-20	3	67	2-81	4	0	3-77	6	33	0-64	4	25	3-75	3	0	4-84	6	0	5-68	23	4	8-41
HEARTVIEW FOUNDATION MANDAN ND 58554	ND-20 *	25	0	0-27	.	.		.	.		.	.		.	.		.	.			.		.		
HILLSBORO COMMUNITY HOSP HILLSBORO ND 58045	ND-21 *	57	19	11-33	2	50	3-91	2	0	2-90	2	50	0-91	6	33	5-68	6	50	12-78	6	0	2-64	12	17	8-56
JACOBSON MEMORIAL HOSP ELGIN ND 58533	ND-22 *	136	8	7-20	2	0	0-89	2	50	2-90	4	25	2-75	1	100	1-97	3	67	7-88	6	0	4-67	22	18	11-48
JAMESTOWN HOSPITAL JAMESTOWN ND 58401	ND-23	553	13	10-18	38	11	12-41	23	26	14-50	16	0	3-40	30	27	12-43	25	24	22-59	19	26	8-47	70	27	11-31
KENMARE COMMUNITY HOSPITAL KENMARE ND 58746	ND-24 *	108	11	9-24	5	60	10-80	3	0	2-82	3	67	5-86	7	0	5-65	6	33	11-77	6	17	3-66	8	13	6-62
LINTON HOSPITAL LINTON ND 58552	ND-25 *	124	16	9-23	4	25	7-81	6	50	8-74	1	0	0-97	21	33	13-51	3	0	3-84	.	.		15	20	8-50
MANDAN HOSPITAL MANDAN ND 58554	ND-26 *	217	11	8-18	18	22	12-53	10	20	11-64	5	0	0-71	10	20	5-54	10	70	17-72	5	20	1-68	18	17	5-41
MCKENZIE CO MEMORIAL HOSP WATFORD CITY ND 58854	ND-27 *	86	10	8-24	1	100	1-98	4	0	4-78	3	0	3-83	5	20	3-70	6	67	13-79	.	.		17	18	6-45
MEDCENTER ONE BISMARCK ND 58501	ND-28	1932	8	8-15	158	23	19-37	104	16	19-37	26	12	8-41	81	23	15-35	67	42	29-53	25	4	5-38	112	8	14-31
MERCY HOSPITAL DEVILS LAKE ND 58301	ND-29 *	585	10	11-19	39	38	18-49	22	9	15-53	9	0	8-62	38	13	13-40	34	21	27-60	13	31	14-63	67	6	10-30
MERCY HOSPITAL VALLEY CITY ND 58072	ND-30	462	16	11-20	34	32	20-53	19	53	13-52	10	20	2-49	25	20	11-44	24	54	25-63	14	29	5-48	81	15	12-32
MERCY HOSPITAL WILLISTON ND 58801	ND-31	716	9	7-15	44	30	17-46	23	17	13-49	16	25	7-48	20	35	11-48	16	38	17-62	17	12	6-46	64	11	10-31
NORTHWOOD DEACONESS HOSP NORTHWOOD ND 58267	ND-32 *	128	19	9-23	3	67	4-84	7	43	7-68	3	33	1-81	4	0	4-77	7	57	16-79	12	17	6-53	6	17	6-70

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ASHLEY MEDICAL CENTER ASHLEY ND 58413	.	.		2	100	5-93	.	.		.	.		21	0	0-28	9	0	0-82	2	0	0-100	10	0	1-46	4	0	0-98
CARRINGTON HOSPITAL CARRINGTON ND 58421	4	25	1-76	.			.	.		.			27	4	1-25	6	0	1-62	2	0	0-100	16	0	1-33	14	0	0-53
CAVALIER COUNTY MEM HOSP LANGDON ND 58249	6	17	6-72	1	100	3-99	1	0	0-97	1	0	0-100	25	4	1-25	3	0	0-88	2	0	0-100	5	0	0-73	7	0	1-57
CITY HOSPITAL NEW ROCKFORD ND 58356	4	25	7-83	1	0	0-97	1	0	0-100	.	.		14	14	1-38	4	0	0-79	1	0	0-100	7	0	0-62	6	0	0-78
COMMUNITY HOSP IN NELSON C MCVILLE ND 58254	2	0	0-90	1	100	1-97	.	.		.	.		6	0	0-65	.			1	0	0-100	14	0	1-37	3	33	0-100
COMMUNITY MEMORIAL HOSP HETTINGER ND 58639	8	25	6-66	8	50	11-71	5	20	0-71	1	0	0-98	47	6	2-19	16	0	0-38	3	0	0-100	42	0	1-18	21	0	0-29
COMMUNITY MEMORIAL HOSP LISBON ND 58054	3	33	3-84				.	.		1	0	0-100	31	6	1-22	14	14	1-38	.	.		18	0	0-31	8	0	0-67
DAKOTA HOSPITAL FARGO ND 58102	18	33	8-52	11	18	14-67	74	14	4-19	14	0	0-97	105	6	3-13	65	2	1-15	17	0	0-35	163	4	2-10	312	1	0-4
DICKEY COUNTY MEM HOSP ELLENDALE ND 58436	2	50	3-92	3	0	7-89	1	100	0-97	.	.		7	0	0-60	8	13	2-54	.	.		22	0	1-26	.	.	
GARRISON MEM HOSP GARRISON ND 58540	.	.		1	100	2-98		.		.			13	0	0-40	1	0	0-100	.	.		6	17	0-79	3	0	0-97
GOLDEN VALLEY CO HOSP BEACH ND 58621	.	.		.	.		.	.		.	.		3	0	0-94	1	0	0-100	.	.		5	0	0-79	1	0	0-100
GOOD SAMARITAN HOSP RUGBY ND 58368	2	100	2-90	2	50	4-92	6	0	1-62	.	.		35	0	1-20	9	11	1-50	1	0	0-100	24	8	1-25	12	8	0-77
GRIGGS COUNTY HOSPITAL COOPERSTOWN ND 58425	2	0	1-90	.			.	.		.	.		7	0	0-74	6	17	0-65	1	0	0-100	9	0	0-50	9	0	0-65
HEARTVIEW FOUNDATION MANDAN ND 58554	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
HILLSBORO COMMUNITY HOSP HILLSBORO ND 58045	1	100	0-97	1	100	1-97	.	.		.	.		3	0	0-81	1	0	0-99	.	.		3	0	0-94	3	0	0-100
JACOBSON MEMORIAL HOSP ELGIN ND 58533	2	50	2-90	1	0	0-97	.	.		.	.		18	0	1-31	1	0	0-100	8	0	0-100	13	0	0-39	5	0	0-86
JAMESTOWN HOSPITAL JAMESTOWN ND 58401	9	33	7-65	8	13	8-66	22	5	2-30	6	0	0-100	73	7	2-14	22	9	1-28	7	0	0-100	34	6	1-19	29	3	0-26
KENMARE COMMUNITY HOSPITAL KENMARE ND 58746	1	0	1-97	1	0	1-97	.	.		.	.		2	0	0-99	5	20	0-68	.	.		13	0	0-40	4	0	0-100
LINTON HOSPITAL LINTON ND 58552	.	.		1	0	0-97	2	0	0-93		.		12	17	1-41	7	0	0-72	1	0	0-100	16	13	1-34	4	0	0-87
MANDAN HOSPITAL MANDAN ND 58554	2	0	3-91	.	.		1	0	0-99		.		37	3	2-20	20	5	0-40	.	.		16	0	1-33	12	0	0-74
MCKENZIE CO MEMORIAL HOSP WATFORD CITY ND 58854	1	0	0-100	1	0	0-97	1	0	0-100	.			6	0	1-62	3	0	0-94	.	.		5	0	0-89	1	0	0-100
MEDCENTER ONE BISMARCK ND 58501	10	10	8-64	7	29	13-76	40	3	2-22	42	0	0-48	169	1	2-10	94	0	1-13	27	0	0-51	224	6	3-9	177	1	0-5
MERCY HOSPITAL DEVILS LAKE ND 58301	3	0	6-88	10	10	15-71	15	7	2-38	2	0	0-100	78	3	2-13	12	0	0-43	9	0	0-100	33	9	1-21	25	0	0-24
MERCY HOSPITAL VALLEY CITY ND 58072	4	100	4-79	.	.		12	0	1-42	.	.		46	2	1-17	15	7	0-47	2	0	0-100	37	0	1-19	19	5	0-29
MERCY HOSPITAL WILLISTON ND 58801	2	0	3-91	2	50	4-92	28	14	3-29	13	0	0-76	108	2	2-12	59	0	1-16	9	0	0-100	51	2	1-15	47	0	0-15
NORTHWOOD DEACONESS HOSP NORTHWOOD ND 58267	4	25	4-78	3	0	9-90	1	0	0-99	.	.		11	9	0-45	1	0	0-98	.	.		9	11	0-52	7	0	0-95

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Oisease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
OAKES COMMUNITY HOSPITAL OAKES NO 58474	NO-33 *	239	13	8-19	5	20	7-76	4	0	3-76	.	.		15	20	10-53	6	50	10-76	10	60	6-57	41	24	12-39
PEMBINA COUNTY MEM HOSP CAVALIER NO 58220	NO-34 *	388	13	10-20	7	43	10-72	25	48	18-54	21	24	7-43	18	17	11-50	19	58	19-61	3	0	3-83	38	13	12-40
PHS INOIAN HOSP FORT YATES NO 58538	NO-35 *	22	18	7-40	2	100	4-92	2	50	0-89	.	.		4	25	4-78	.	.		2	0	1-89	3	0	2-81
PHS INOIAN HOSPITAL BELCOURT NO 58316	NO-36 *	66	9	4-20	1	0	0-97	2	50	1-89	2	0	0-90	4	25	2-74	1	0	1-97	1	0	0-99	13	15	3-44
RENVILLE BOTTINEAU MEMORIA MOHALL NO 58761	NO-37 *	83	11	8-24	4	25	4-77	3	33	7-88	4	0	2-74	2	0	2-90	2	50	4-92	3	0	5-86	10	30	7-59
RICHAROTON COMMUNITY HOSP RICHAROTON NO 58652	NO-38 *	94	10	8-23	1	100	3-99	7	0	9-70	2	0	1-89	1	100	1-97	2	0	4-92	4	50	1-74	15	13	8-50
ROLETTE COMMUNITY HOSPITAL ROLETTE NO 58366	NO-39 *	77	12	7-23	1	100	3-99	1	100	1-98	2	0	0-94	6	17	4-66	2	50	6-94	1	0	1-97	15	27	7-48
ROLLA COMM HOSPITAL ROLLA NO 58367	NO-40 *	149	13	9-22	2	100	7-95	5	40	7-76	2	0	0-90	14	36	8-52	5	80	12-82	5	0	0-70	24	8	9-43
SAKAKAWEA MEOICAL CTR HAZEN NO 58545	NO-41 *	182	8	9-21	4	75	11-86	10	20	11-64	5	20	2-68	10	10	8-59	9	22	16-73	9	0	2-54	26	4	8-40
ST ALEXIUS HOSP BISMARCK NO 58501	NO-42	1951	8	8-14	173	18	19-37	32	19	17-49	30	17	6-36	66	20	14-35	63	32	27-52	37	11	8-36	129	13	12-28
ST ALOISIUS HOSPITAL HARVEY NO 58341	NO-43 *	275	12	12-22	10	70	19-74	12	25	11-59	5	20	1-68	15	20	15-61	14	29	18-66	18	0	5-42	45	9	14-41
ST ANOREWS HOSP BOTTINEAU NO 58318	NO-44	263	12	11-22	7	86	18-81	10	40	9-62	5	40	10-80	17	24	10-50	7	14	11-73	23	9	7-43	40	18	15-43
ST ANSGARS HOSP PARK RIVER NO 58270	NO-45 *	144	18	12-25	11	64	14-67	9	33	8-62	6	33	2-63	13	15	12-59	8	25	17-77	3	0	1-81	17	18	9-50
ST GERARO'S COMM HOSP HANKINSON NO 58041	NO-46 *	90	7	5-20	2	100	6-94	1	0	0-97	2	0	1-89	8	13	5-60	2	0	4-92	1	100	0-98	11	9	5-52
ST JOHNS HOSP FARGO NO 58102	NO-47	888	8	7-14	63	13	14-38	19	47	16-57	22	18	6-40	34	24	13-42	9	67	16-73	20	25	10-49	61	18	10-32
ST JOSEPH'S HOSPITAL OICKINSON NO 58601	NO-48 *	791	7	8-15	45	29	16-44	24	21	14-50	13	15	4-48	31	23	11-41	10	20	15-69	28	0	6-38	85	14	13-33
ST JOSEPH'S HOSPITAL MINOT NO 58701	NO-49	1076	8	7-14	75	24	19-42	24	33	14-50	20	15	6-42	50	24	15-40	25	32	22-59	22	14	7-43	58	21	12-35
ST LUKES HOSP FARGO NO 58102	NO-50	3264	10	8-15	341	20	17-32	113	19	20-38	55	16	10-34	108	23	16-34	117	45	28-48	34	12	8-38	162	21	17-32
ST LUKES HOSPITAL CROSBY NO 58730	NO-51 *	133	14	8-21	3	67	3-83	6	50	5-69	9	11	2-53	5	0	2-68	3	33	5-86	4	0	1-74	25	12	10-43
ST LUKES TRI-STATE HOSP BOWMAN NO 58623	NO-52 *	185	10	9-21	14	21	8-53	4	50	6-80	8	13	4-58	11	27	8-58	8	25	11-70	6	0	1-63	34	12	10-38
STANLEY COMMUNITY HOSP STANLEY NO 58784	NO-53 *	141	4	7-19	6	17	8-74	.	.		4	25	1-74	6	17	5-68	.	.		5	20	3-71	27	0	8-39
TIOGA COMM HOSP TIOGA NO 58852	NO-54 *	178	4	6-17	4	50	7-82	4	0	8-83	4	0	0-76	9	11	8-63	2	0	3-91	7	0	1-59	20	5	7-43
TOWNER CO MEM HOSP CANDO NO 58324	NO-55 *	112	11	9-23	3	67	11-93	9	22	11-67	1	0	0-98	7	43	5-64	4	0	8-83	8	0	4-60	11	18	8-57
TRINITY MEOICAL CENTER MINOT NO 58701	NO-56	1500	10	8-15	137	18	17-35	54	24	16-41	52	4	9-32	74	20	14-34	42	40	26-56	23	13	8-44	82	20	12-32
TURTLE LAKE COMM MEM HOSP TURTLE LAKE NO 58575	NO-57	51	10	7-28	4	75	9-85	1	0	1-97	1	0	0-98	3	0	1-81	.			6	0	5-68	7	0	3-60
UNION HOSP MAYVILLE NO 58257	NO-58 *	203	13	10-21	8	38	11-71	13	31	10-57	9	0	2-52	14	0	8-52	14	43	21-69	16	19	6-46	27	22	8-38

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
OAKES COMMUNITY HOSPITAL OAKES NO 58474	6	33	3-68	2	0	5-94	4	0	0-76	.	.		32	3	1-20	7	14	0-74	6	0	0-100	10	0	0-47	11	0	0-83
PEMBINA COUNTY MEM HOSP CAVALIER NO 58220	7	57	14-78	.	.		5	20	0-72	.	.		56	2	2-17	11	9	1-45	1	0	0-100	37	0	1-19	13	0	0-52
PHS INOIAN HOSP FORT YATES NO 58538	1	0	0-97	.	.		.	.			.		2	0	0-100	.	.		.	.		1	0	0-100	.	.	
PHS INOIAN HOSPITAL BELCOURT NO 58316	.	.		1	100	1-97	.	.		.	.		6	0	0-73	4	0	0-78	.	.		2	0	0-100	1	0	0-100
RENVILLE BOTTINEAU MEMORIA MOHALL NO 58761	.	.		.	.		.	.		.	.		9	0	0-51	7	0	0-66	1	0	0-100	4	50	0-77	3	0	0-100
RICHAROTON COMMUNITY HOSP RICHAROTON NO 58652	2	50	2-90	.	.		2	0	0-98	.	.		11	0	0-50	3	0	1-81	1	0	0-100	7	0	0-62	2	0	0-100
ROLETTE COMMUNITY HOSPITAL ROLETTE NO 58366	.			.	.		2	0	0-91	.	.		6	0	0-68	1	0	0-100	.	.		5	0	0-70	4	0	0-100
ROLLA COMM HOSPITAL ROLLA NO 58367	1	0	1-97	7	14	14-77	1	0	0-97	1	0	0-100	20	5	0-29	1	0	0-100	.	.		15	0	1-35	9	0	0-72
SAKAKAWEA MEOICAL CTR HAZEN NO 58545	10	0	4-57	1	0	0-98	.	.		1	0	0-100	14	7	0-39	1	0	0-97	.	.		21	0	1-28	9	0	0-63
ST ALEXIUS HOSP BISMARCK NO 58501	10	40	18-75	17	41	25-71	43	9	4-24	40	0	0-44	157	3	3-11	135	2	1-11	28	4	0-39	191	5	3-10	222	0	0-5
ST ALOISIUS HOSPITAL HARVEY NO 58341	6	50	6-72	4	0	5-79	3	0	0-86	.	.		25	8	2-27	8	0	0-55	.	.		27	7	1-24	16	0	0-50
ST ANOREWS HOSP BOTTINEAU NO 58318	1	0	0-99	1	100	1-97	3	0	1-81	.			24	4	1-25	3	0	0-93	1	0	0-100	18	0	0-31	13	0	0-49
ST ANSGARS HOSP PARK RIVER NO 58270	.	.		1	100	3-99	.	.		.	.		21	14	1-28	1	0	0-98	.	.		9	0	0-50	8	0	0-67
ST GERARO'S COMM HOSP HANKINSON NO 58041	1	100	1-98	1	0	0-97	2	0	0-92	.	.		25	0	0-24	1	0	0-100	.	.		5	0	0-80	4	0	0-98
ST JOHNS HOSP FARGO NO 58102	6	17	9-77	5	20	7-77	25	12	2-29	74	0	0-14	84	5	2-12	38	5	1-20	3	0	0-100	23	4	1-26	123	2	1-7
ST JOSEPH'S HOSPITAL OICKINSON NO 58601	7	14	10-74	6	33	7-72	18	6	1-33	13	0	0-97	92	5	2-13	51	0	1-17	10	0	0-99	53	2	1-15	42	0	0-20
ST JOSEPH'S HOSPITAL MINOT NO 58701	7	14	5-67	7	43	13-76	25	4	2-28	6	0	0-100	88	3	2-13	64	2	1-15	11	0	0-100	62	0	1-14	101	1	0-8
ST LUKES HOSP FARGO NO 58102	28	21	13-52	26	31	25-64	82	11	3-17	14	0	0-94	238	7	3-10	126	2	1-11	44	0	0-72	392	3	3-8	310	1	0-4
ST LUKES HOSPITAL CROSBY NO 58730	1	0	0-98	1	0	3-99	3	33	0-91	.			16	6	1-34	5	0	0-69	2	0	0-100	5	0	0-84	6	0	0-93
ST LUKES TRI-STATE HOSP BOWMAN NO 58623	5	0	6-76	.	.		5	0	0-70	.	.		24	0	0-25	1	0	0-100	2	0	0-100	4	0	0-86	9	0	0-70
STANLEY COMMUNITY HOSP STANLEY NO 58784	1	0	0-99	.	.		2	0	0-91				15	0	1-35	3	0	0-84	1	0	0-100	4	0	0-83	8	0	0-65
TIOGA COMM HOSP TIOGA NO 58852	2	0	2-90	.	.		.	.		.	.		24	4	1-25	3	0	0-99	4	0	0-100	25	4	1-24	14	0	0-51
TOWNER CO MEM HOSP CANOO NO 58324	2	0	1-90	.	.		.	.		.	.		19	0	0-30	1	0	0-100	.	.		8	0	0-57	2	0	0-100
TRINITY MEOICAL CENTER MINOT NO 58701	15	7	5-51	8	25	9-68	39	15	3-24	11	0	0-95	147	4	2-10	92	1	1-13	12	0	0-100	149	6	2-9	125	1	0-7
TURTLE LAKE COMM MEM HOSP TURTLE LAKE NO 58575	1	0	0-97	.	.		.	.		.	.		6	17	1-62	3	0	0-89	.	.		5	20	0-76	.	.	
UNION HOSP MAYVILLE NO 58257	2	0	2-90	.	.		2	0	0-94	.	.		21	0	0-29	2	0	0-98	10	0	0-100	7	0	0-60	9	0	0-83

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNITED HOSP GRAND FORKS ND 58201	ND-59	2283	10	9-15	218	15	17-34	66	24	19-42	64	22	13-36	72	21	15-35	58	40	30-56	36	11	8-37	148	18	14-30
UNITY HOSPITAL GRAFTON ND 58237	ND-60	187	22	13-25	10	40	12-66	15	40	12-56	11	36	4-51	11	18	7-55	21	38	21-62	7	14	4-63	18	22	7-45
WISHEK COMMUNITY HOSP WISHEK ND 58495	ND-61 *	259	8	8-17	7	14	8-69	12	25	11-59	5	0	2-68	8	25	5-60	10	50	16-71	2	50	1-89	42	2	9-34

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNITEO HOSP GRANO FORKS NO 58201	15	20	13-62	20	35	23-66	126	12	6-18	26	0	0-68	200	5	3-11	118	2	2-12	28	0	0-58	127	6	2-11	294	1	0-4
UNITY HOSPITAL GRAFTON NO 58237	4	100	16-92	2	50	5-94	1	0	0-99	.	.		15	7	0-38	2	50	0-93	.	.		11	9	1-44	6	0	0-87
WISHEK COMMUNITY HOSP WISHEK ND 58495	2	50	1-90	2	0	4-93	.	.		1	0	0-100	32	3	1-21	9	0	0-51	5	0	0-100	16	6	1-33	16	6	0-43

*Written Comments Not Submitted.

Dickey County Memorial Hospital
241 Main Street • Box 220
ELLENDALE, NORTH DAKOTA 58436
(701) 349-3611

October 24, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We are responding to your request for comments concerning the mortality information to be published for this hospital (Provider #350065).

We would first like to make note of the number of overall cases you are reporting (238). Our records indicate there were 262 medicare admissions to this facility in 1986. It is apparent that the difference of 24 is because your count excludes multiple admissions of the same patient. Yet, the patient with multiple admissions obviously is experiencing a declining health status. For example, your data for the diagnostic category of cancer lists a rate of 75% which approaches the upper range of 85%. Yet, if one of these patients is among the missing 24 not listed, the percentage would drop to 60%. If that same patient had been admitted three times over the year, the figure would drop to 50%. Therefore, this means of measurement appears to be highly questionable.

Our second point follows closely with what we have just demonstrated. Specifically, it deals with the sample size. It is very common knowledge that a small sample size produces very questionable results. In essence, the majority of this hospital's data falls into the category of small sample size and those limitations. The data reported under "severe trauma" clearly illustrates this problem. Let us take this one step further and place yourself in the emergency room as that one patient's physician. You treat this one medicare patient with severe trauma, but unfortunately all your efforts were not successful. But you also know you did successfully treat nine other medicare patients with severe trauma over the past five years. Therefore, Dr. Roper, should your mortality rate be published as 100% or 10%?

The third point in need of emphasis is that this data reflects only medicare patients. If we follow the same "severe trauma" example of the previous paragraph, we could also interject that there may have been a total of 20 severe

Presentation Health System . . . Caring for You Since 1901

trauma patients treated in the facility. With this additional data, the rate would be 5% or 95% less than you are reporting. Again, the data is distorted due to the use of only medicare patient data and the small sample size.

The issue of patient and/or family wishes is not covered in your data either. Again, we refer you to the cancer deaths. One of the three you list was discharged to their home at his and his families request, i.e. he did not wish to die in the hospital. If that one death were removed from the calculation the rate drops from 75% to 50%

Another issue which closely follows the above facts is that of continuity of health care. The above patient was discharged to his home while the other two patients expired in a skilled nursing facility. We do not therefore feel that any of these three cancer patients were treated inappropriately as the high mortality rate would imply.

We would also take issue with the nonuse of the other information you gathered. You have data on the patient's age, but you do not utilize it in presenting the mortality rates. For example, two of the reported patients with pulmonary disease were 98 years old at the time of their deaths. My own personal desire would be to live to the age of 98, but without my death being used as a judgement toward my physician or the hospital in which I die. Should not life expectancy be considered in the presentation or calculation of the rates?

We would point out too that of the 27 deaths mentioned, 10 or 37% of these patients were transferred to this hospital from a skilled nursing facility. Therefore, it is highly probable that the health status of many of these individuals was already less than optimum. Again, we would note that you calculated the rates based on raw data and without utilizing other factors such as these or life expectancy. While there is a hint of utilizing this data in the predicted percentages, we believe it should also be used in some form of adjusted mortality rate.

It should be mentioned that the fifth date of dealth listed is incorrect. It presently states 10-31-86, but should read 10-23-86.

Should you intend to continue this practice, it is our desire that future data can account for the points we have mentioned (such as sample size, age, chronic conditions, and other related factors). Finally, while we do appreciate the opportunity to comment, it should be realized that all of this process takes time and the expenditure of scarce hospital funds. Is the public really gaining by the expenditure of these funds?

Sincerely,

Gordon U. Smith
Administrator

GARRISON MEMORIAL HOSPITAL
TELEPHONE (701) 463-2275 • GARRISON, NORTH DAKOTA 58540

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The data used by HCFA indicated that a total of 157 Medicare patients were admitted to Garrison Memorial Hospital in 1986. Of that 157, 9 Medicare patients expired within 30 days of admission. Of these, 6 died while still in the acute hospital, 1 died in Medicare swing bed, 1 died in intermediate swing bed and 1 died after being transferred to another acute care hospital for more intensive care. Our records indicated that 184 Medicare patients were admitted in 1986, including acute care and Medicare swing bed.

In 3 diagnostic categories, the actual mortality rate is lower than the predicted mortality rate. Those categories are cerebrovascular accidents, gastrointestinal catastrophies, and metabolic/electrolyte disturbances. In one diagnostic category, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. You record one patient with sepsis and one patient expired. We question whether one case is statistically significant. Our statistics reveal 3 patients with sepsis and one patient expired. Then the actual mortality rate would be within the predicted rate. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals.

No diagnostic category could be identified in which an unusually large percentage of deaths occurred after discharge. All the patients included in the case listing were hospitalized at the Garrison Memorial Hospital. Two patients did expire after being discharged from the hospital. One of those expired in the Garrison Memorial Hospital swing bed. The other was transferred for more intensive care. Both patients had preexisting chronic pulmonary and cardiac disease processes.

The Garrison Memorial Hospital has swing beds, an attached intermediate care facility, and there is also a free-standing nursing home in Garrison. 40 percent of the patient population is over 65. The elderly population tend to have multiple medical conditions and risk factors. Swing bed admissions frequently are terminally ill and tend to be admitted to swing bed when all other resources are exhausted. Those patients are frequently readmitted to acute care as medical conditions change.

In reviewing the 6 deaths that occurred in the acute care population of the hospital, 5 were "no code" orders per physician order and family agreement. Both of the patients that expired in swing bed also had "no code" orders. Our initial chart review indicated that the deaths were expected and no patterns or underlying causes were found.

Sincerely,

Sister Madonna Wagendorf

Sister Madonna Wagendorf
Administrator

SMW/hh

Jamestown
Hospital

419 5th Street N.E.
Jamestown, North Dakota
58401-3360
252-1050

October 27, 1987

William L. Roper, M.D., Administrator
Healthcare Financing Administration
Health Standards and Quality Review
Hospital Mortality Rates
P.O. Box 26687
Baltimore, MD 21207

Dear Dr. Roper,

Jamestown Hospital is a 56 bed not-for-profit community, acute care hospital serving an estimated population, including primary and secondary service areas, of 50,000. Our service area is primarily a rural agricultural community and is situated 100 miles from another major health facility.

Survival of rural health care facilities is a critical issue these days. It is apparent that when the Medicare mortality rates are released, the struggling institutions will experience another striking blow as they attempt to provide services to people within their communities, namely the Medicare population.

I have grave concern that the misinterpretation of the mortality data will cause confusion and apprehension to the Medicare beneficiaries who we serve. Mortality rates by themselves do not measure quality. Mortality rates appropriately can be used as a guide to direct peer review. Quality can only be evaluated through a process of peer review, not through statistical comparisons.

A mortality rate higher than predicted does not confirm the existence of quality problems, just as a mortality rate lower than predicted does not establish that the hospital provides "higher quality care". Actual mortality rates are effected by the case mix of the patients treated at that hospital.

The HCFA data does not include a measure of severity, whether the patient was transferred to the hospital from a nursing home, or a whole list of variables effecting the interpretation of the data.

Finally, the mortality rates apply only to the Medicare patients and differ from other indicators of inpatient mortality because they are calcualted using only deaths that occur within thirty days of the last admission of a Medicare beneficiary to a hospital during 1986.

In closing, the release of a HCFA mortality data places rural health care facilities in jeopardy because of the misinterpretation that can occur.

Sincerely,

Richard W. Hall
President

RWH:mrs

medcenter one ™

Office of the President

October 23, 1987

Dr. William L. Roper
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

Reference your letter dated September 21, 1987.

We respectfully request that the following information be added to our mortality data to be published in December.

HL	Low Risk heart Disease	Average Age 75 years old
HM	Severe Chronic Heart Disease	Average Age 80.8 years old
HS	Severe Acute Heart Disease	Average Age 77.5 years old
SE	Sepsis (2 deaths)	Average Age 75 years old

Thank you for your consideration.

Sincerely,

Terrance G. Brosseau, FACHE, FHFMA
President

jrm

Medcenter One, Inc.
300 North Seventh Street
Bismarck, North Dakota 58501
Telephone 701/224-6000

MERCY
Medical Center

October 21, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D. C. 20201

Dear Dr. Roper:

The Mercy Hospital of Williston has received its mortality data as distributed by the Health Care Financing Administration and wishes to make the following comments.

The Mercy Hospital of Williston has had a Quality Assurance Program in effect for a number of years to monitor the quality of patient care available through our institution. Quality Assurance monitoring has been one of the highest priorities of the Board of Directors of the hospital and quality assurance monitoring activities take place every day within our institution. Mercy Hospital of Williston is committed to providing quality services to all patients we serve.

In publishing the mortality data for all hospitals, the Health Care Financing Administration (HCFA) by its own admission acknowledges that the mortality data is not a complete measure of quality of care at an individual hospital. HCFA also suggests that the data will be helpful for individual consumers by providing additional information to them, however, it does not suggest how the individual consumers might apply this information. It is Mercy Hospital's strong belief that publication of mortality data by the federal government which is not fully analyzed and does not take into account significant issues such as severity of illness is irresponsible behavior on the part of the federal government. It is also Mercy Hospital's belief that alternative approaches to addressing quality of care issues will have a far greater positive effect on influencing the level of quality of care than the direction taken by HCFA. Such alternatives would include improving funding for health care to the indigent and underserved, reducing bureaucracy and overhead required to comply with federal regulations and approaching deficit reduction in a more even-handed approach. In addressing deficit reduction in the recent past for example funding to the Medicare program has been slashed in far greater proportion than spending in areas such as defense.

1301 - 15th Avenue W. • Williston, ND 58801 • Phone 701-774-7401

William Roper, M.D.
Page two
October 21, 1987

Consumers should be cautioned by HCFA that use of the mortality data as an indicator of quality of care available in an institution will lead to inaccurate conclusions because of the flaws in the data and methodology used to produce them.

Sincerely,

Robert A. Fale.

Robert A. Fale, President
& Chief Executive Officer

RAF:JN

MERCY HOSPITAL

DEVILS LAKE, NORTH DAKOTA 58301

October 16, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

In reviewing the Mortality Information for Mercy Hospital of Devils Lake, North Dakota, we find that our hospital specific actual mortality rates fall within or below the predicted range of mortality rates for all of the listed categories.

The attached forms indicate eleven patients died after discharge. We investigated these eleven cases and found the following information:

4 - died at Lake Region Lutheran Home (skilled care)

3 - died at Good Samaritan Home (intermediate care)

1 - died in a Transitional Bed at Mercy Hospital (swing bed)

1 - died in Mercy Hospital Emergency Room day after discharge

1 - died at own home

1 - place of death unknown

We reviewed the actual dates of death listed on the attached form and find all dates of death are correct.

Sincerely,

Leona Seiler, RRA

Leona Seiler, RRA
Director of Medical Records
Mercy Hospital
Devils Lake, North Dakota 58301

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

"Let all be received as Christ"
ST. ALEXIUS
MEDICAL CENTER
900 East Broadway • Box 1658 • Bismarck, North Dakota 58502 • Phone 701-224-7000

October 27, 1987

Health Care Finance Administration
William Roper, M.D.
Administrator
Washington, D.C. 20201

RE: St. Alexius Medical Center
Bismarck, North Dakota 58501
Provider No. 35-0002

Dr. Roper:

Data Verification
The data used by HCFA indicate that a total of 147 Medicare patients admitted to St. Alexius Medical Center died within 30 days of admission. Of these, 125 died while still a patient of the hospital, while 22 died after discharge. Our own records indicate that 3,258 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at St. Alexius Medical Center is correct. Our own records also indicate that of the 126 Medicare patients who died within 30 days of admission while still an inpatient, 21 were still alive at the time of discharge. It is impossible to determine the percentage of the 21 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

In zero (0) of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to zero (0). Several factors may account for this difference.

Unique Services, Results and Comments of Record Review:

1. This data can be a misleading quality indicator.

2. This data only encourages internal peer reviews.

3. This data cannot be used directly as a measure of hospital performance.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

4. This data fails to consider a wide range of factors with a significant impact on mortality (i.e., patients general health status, stage of patients illness upon admission, psychological condition and family support).

5. The model was not validated prior to publishing.

6. St. Alexius Medical Center is a tertiary care center specializing in many high risk areas of care, i.e., heart, lungs, renal, cancer and infectious diseases.

7. The mortality value did not identify that the mortality was related to non-mortality problems, such as nosocomial infections, re-admissions, etc.

8. The day indicator, greater than 30 day stays and less than 24 hour day stays were excluded from the statistics however those deaths occurring up to 30 days post hospital discharge were included on the statistics which skews the published statistics.

Sincerely,

Richard A. Tschider, FACHE
Administrator
St. Alexius Medical Center

RT/LK/lc

St. Andrews Hospital
Bottineau, North Dakota

Provider Number: 35-0007

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

ST. JOHN'S AND ST. ANSGAR HOSPITALS

510 S. 4th STREET • FARGO, NORTH DAKOTA 58103
Telephone (701) 232-3331

715 N. 11th STREET • MOORHEAD, MINNESOTA 56560
Telephone (218) 299-2200

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs,

The mortality report you sent to St. Ansgar Hospital was checked and found accurate.

Sincerely,

Marjean Gilbert

Marjean Gilbert, Director of Support Services

St. Ansgar Hospital
Provider No. 24-0029
24-S026 (Psych)

ST. JOSEPH'S HOSPITAL

3rd STREET S.E. AND BURDICK EXPRESSWAY • MINOT, N.D. 58702-5001 • (701) 857-2000

October 21, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: COMMENTS ON THE HCFA MORTALITY DATA

Data Verification

The data used by HCFA indicates that a total of 87 Medicare patients admitted to St. Joseph's Hospital died within 30 days of admission. Of those, 64 died while still a patient of the hospital, while 23 died after discharge. Our own records indicated that 1,853 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual. We have no way of verifying whether the number of Medicare patients treated at St. Joseph's Hospital is correct.

As per your request, we have verified the accuracy of this data according to our records, and have indicated on the attached sheets the discrepancies (4) that were found. It is impossible to verify how many of the other 19 patients actually died after discharge, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

Review of the mortality figures supplied indicated that in all of the diagnostic categories reviewed, the experienced death rates for patients treated at St. Joseph's Hospital are within the expected ranges. Indeed, the rates appear in every case to be in the lower half of the expected ranges.

Death rates are not in themselves an indication of quality medical care, however these statistics certainly support our belief that St. Joseph's Hospital delivers high quality care.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

ATTACHMENT 5

Hosp. ID# 350006

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	15	3	15	3
CE -- Cerebrovascular Accidents	7	1	7	1
GC -- Gastrointestinal Catastrophes	2	1	2	1
GI -- Gastrointestinal Disease	3	0	3	0
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	0	0	0	0
HM -- Severe Chronic Heart Disease	9	3	9	3
HS -- Severe Acute Heart Disease	7	1	8	0 *
ME -- Metabolic/Electrolyte Disturbances	1	2	1	2
OP -- Orthopedic Disorders	0	1	0	1
PN -- Pulmonary Disease	9	3	9	3
RN -- Renal Disease	6	1	1	0 *
SE -- Sepsis	3	0	3	0
TR -- Severe Trauma	0	1	0	1
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	7	6	9	4 *
Total -- All Categories	64	23	68	19

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

St. Luke's Hospitals
MeritCare

5th St. North at Mills
Fargo, North Dakota 58122
701 234-6000

October 23, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore MD 21207

Dear Doctor Roper:

Re: HCFA Mortality Data
St. Luke's Hospitals
Medicare Provider No. 35-0011

The data used by HCFA indicate that a total of 3,264 Medicare patients were admitted to St. Luke's Hospitals during 1986. Our own records indicate that 5,115 Medicare admissions occurred in 1986. Presumably, the discrepancy reflects multiple admissions of individual patients, but we have no way of verifying that the number of patients treated at St. Luke's Hospitals is correct.

The data used by HCFA indicate that a total of 318 Medicare patients died within 30 days of admission. Our own records indicate that 46 (14%) of that number were still alive at the time of discharge. We have no way of determining whether their death was related to the reason for which they were hospitalized.

St. Luke's Hospitals is a 404 bed hospital which provides a broad range of specialized tertiary care services, especially in the areas of cardiology, cardiovascular surgery, neurology, neurosurgery, oncology, pediatrics and trauma. St. Luke's Hospitals serves as a referral center for many other hospitals and because of this, the "average" patient treated by the hospital is more acutely ill than patients treated at primary care hospitals.

Also, St. Luke's Hospitals admits many hospice patients who are in the terminal phase of their disease at the time of their admission to the hospital.

St. Luke's Hospitals recognizes the need for monitoring the quality of care provided and has an ongoing quality assurance program to accomplish that function. The review of deaths is included in our quality assurance process and we will also use the HCFA mortality data. However, an appropriate assessment of hospital performance is dependent upon many variables and requires a review and comparison of other quality indicators including readmissions, complications, infections, hospital incurred injury as well as others.

St. Luke's Hospitals supports the release of quality assurance information to the public so that consumers are better able to make informed choices about their health care provider. However, the HCFA information is specific to Medicare patients, who are primarily age 65 and older, and comparisons should not be made with other groups of patients that do not fit that category.

The specific methodology used by HCFA to calculate the predicted mortality ranges has not been made available to us and, to our knowledge, has not yet been validated. We do support continued development and testing of this model so that the information provided by HCFA will have greater acceptance and be more useful to all parties having an interest in the information.

Sincerely,

Philip M. Wells

Philip M. Wells, FACHE
Executive Vice-President and Chief Operating Officer

vb

TRINITY MEDICAL CENTER

TERRY G HOFF
President

October 28, 1987

Health Care Financing Administration
Department of Health & Human Services
Attention: HSQ-148-GNC
P. O. Box 26676
Baltimore, Maryland 21201

Burdick
Expressway
at Main Street

Minot
North Dakota
58701

701/857-5113

Gentlemen:

Attached please find our comments regarding the HCFA mortality data that was recently published.

I trust these comments will help to explain the reasoning for some of Trinity's figures.

If you require additional information, please do not hesitate to contact me.

Sincerely,

Terry G. Hoff

Terry G. Hoff
President

sl
enclosure

*A Tradition
of Excellence*

TRINITY MEDICAL CENTER

Burdick Expressway at Main Street
MINOT, NORTH DAKOTA 58701

Telephone 701/857-5000

COMMENTS ON THE HCFA MORTALITY DATA

Trinity Medical Center's ongoing commitment to quality care is seen in quality assurance activity in every area involving patient care. Each department monitors quality by comparing established criteria with its data on patient care and patient outcome. If a problem is revealed, the department takes action to remedy the problem. The quality assurance process follows up with a re-evaluation to determine if the problem is resolved.

Mortality is only one of many quality indicators that may be used to assess hospital performance. Also, mortality data do not identify areas in which a hospital provides "high quality" or "low quality" care or otherwise measure hospital performance. Factors that need to be assessed are patients' genetic background, severity of illness, the hospital's case mix and range of services.

Trinity Medical Center serves as a regional referral center for northwest North Dakota, receiving acutely and severely ill patients from surrounding rural hospitals. In 1986, a significant percentage of Medicare patients who died at Trinity Medical Center were transferred in from other health care facilities.

A large majority of Medicare patients who died at Trinity in 1986 had been admitted from the Emergency & Trauma Center or from a nursing home. In general, death rates correlate with the percent of hospital admissions from the emergency department and from nursing homes.

We are unable to compare the HCFA mortality data with our own records because HCFA has not released the detailed specifications of the analytic methods they used to generate actual and expected mortality rates. Also, the HCFA data base for their analysis has not been made available.

Trinity Medical Center is a 251 bed rural hospital under non-profit, local ownership and management commited to community service and charity care. About 60 percent of the area's cancer patients are diagnosed and treated at Trinity. Trinity has the area's only kidney dialysis unit. The community leader in emergency and trauma care, Trinity has a combined intensive care and coronary care unit as well as a new, enlarged surgery unit. Trinity Nursing Home is a subsidiary corporation and operates at near maximum capacity with 441 beds.

Turtle Lake Community Memorial Hospital

P. O. Box 280 Turtle Lake, ND 58575-0280

Phone 701-448-2331

MIKE DIDIER,
Administrator

September 30, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21297

Dear Mr. Roper,

I am writing this letter out of concern with the manner in which the general public may interpret hospital mortality information. Out of fifty one Medicare admissions in FY 1986 there were five deaths identified within 30 days of admission; four of which occurred in the hospital and one in a nursing home the patient was transferred to. The age of these deceased patients was from 73 yrs. to 95 yrs. with the average age of 82. Four out of five of the deceased patients were admitted to acute or skilled nursing care with terminal disease for supportive or palliative care. The predicted outcome (mortality rate of those individuals was 100%. Therefore the predicted range of mortality for these patients in the diagnostic category CA was in fact>75% and not from 9-85% as identified in the report. I am extremely concerned that the general public given such isolated and statistically insignificant data may be led to believe that such information has validity in their process of determining such issues as the quality of care or the placement of a family member in a given institution. I also see an extremely potential detriment to rural health care facilities who treat a large number of terminally ill and do not experience the large numbers of patients in these categories as do metropolitan areas that would in effect offset or substantially reduce such publically prepared reports on mortality rates.

If the terminally ill who have been admitted for terminal care are eliminated, our statistical report reflects a substantially different picture. For example:

All causes	47	2%	7-28%
CA	1	0	9-85%
CE	1	0	1-97%
GC	1	0	0-98%
GI	5	0	1-62%
GU	3	0	0-89%
HL	5	20	0-76%
HM	3	0	1-81%
ME	6	0	5-68%
PN	7	0	3-60%
RN	1	0	0-97%

The only patient that was identified in this manner was a 73 yr. old male admitted for acute GI Bleed, Peptic ulcer disease, anemia, chronic CHF, hypertension and border line diabetes mellitus. Condition on admission was guarded. Cause of death was an acute myocardial infarction. The statistical

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

GENERAL ACUTE CARE — EMERGENCY ROOM SERVICES — SWINGBED CARE — CLINIC SERVICES

Turtle Lake Community Memorial Hospital

P. O. Box 280 Turtle Lake, ND 58575-0280

Phone 701-448-2331

MIKE DIDIER,
Administrator

reports places this person in the category of low risk heart disease and may give the public the perception that mortality was unacceptable or unanticipated. The person in fact has significant and serious disease and prognosis was guarded at best.

When such broad ranges of predicted mortality are given it leaves the public to speculate without fact as to whether the outcome was acceptable or not and whether this reflects a fair picture of quality issues or not.

I do believe that such information when used appropriately by trained professionals may identify an area of "Potential" concern where further review may be valid. I do not believe that reports provided to the untrained non medical public that are not in adequate numbers to be statistically significant are of benefit. Nor do I believe that reports provided in a matter where the controlled range (predicted mortality) is so broad that significant speculation is required to make a conclusion are of benefit to our general public, HCFA or our hospitals who are dedicated to providing quality health.

I would appreciate your review and assistance in this regard and hope that these reports can be modified to more accurately portray our experience here.

Again, thank you.

Sincerely,

Michael G Didier

Michael G. Didier

c. Honorable Quentin Burdick, U.S. Senator North Dakota
   Honorable Byron Dorgan, U.S. Representative North Dakota

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P. O. Box 280 Turtle Lake, ND 58575-0280

Phone 701-448-2331

MIKE DIDIER,
Administrator

COMMENTS REGARDING MORTALITY REPORT
FOR OUR FACILITY-MEDICARE # 350050

This report reflects a total number of fifty one (51) Medicare patients for FY 1986. Of the fifty one cases, five deaths occurred within thirty days of admission. Four deaths occurred within this facility and one in a nursing home the patient was transferred to from our facility. Of the five deaths that occurred, four of these patients were admitted with terminal diseases and supportive care was given to the patients and their families during these difficult times. Three of the four patients had terminal cancer and one patient had terminal gastrointestinal disease.

The fifth patient noted in this report died of an acute myocardial infarction (heart attack) while in this facility. This patient was admitted with acute gastrointestinal bleeding, peptic ulcer disease, anemia, chronic congestive heart failure, hypertension and borderline diabetes mellitus. His condition was guarded.

In adjusting for the patients that were admitted for terminal care, the hospitals mortality was less than two percent. Such statistics reflect both a very low mortality rate and a willingness to support our dying patients and family members in the communities we serve.

We are proud of our record of service to our communities and of the high standards of care we provide.

Sincerely,

Michael G Didier

Michael G. Didier
Administrator

GENERAL ACUTE CARE — EMERGENCY ROOM SERVICES — SWINGBED CARE — CLINIC SERVICES

Medical Park, S. Columbia Road, P.O. Box 6002, Grand Forks, ND 58206-6002 • Phone 701-780-5000

The UNITED HOSPITAL

THE UNITED HOSPITAL
GRAND FORKS, NORTH DAKOTA
350019

COMMENTS ON HCFA MORTALITY INFORMATION

The United Hospital's mortality rate as published by HCFA does not demonstrate alarming figures but it is necessary to caution one from using this data as a comparative guide in evaluating the quality of care given at our hospital. Other than the obvious concerns that all patients have been categorized without regard to their severity of illness, and, that patients who die after discharge are assumed to do so as a result of treatment given within our hospital, (ignoring factors such as availability of pre or post hospital care, patient wishes, etc.), there are other concerns that need to be expressed.

First of all, the cause of death may not be related to the diagnostic category in which the patient is placed. An example is the category of Orthopedic Disorders. Chart review at The United Hospital revealed that all the patients placed in this category initially came into the hospital because of severe back pain. The cause of death in all cases was not due to that orthopedic condition but, rather, to an underlying disease such as cancer or end-stage renal disease. Thus, while the death rate indicates the patients died of some orthopedic disorder, none did. HCFA bases their mortality data on the primary diagnosis of the last admission. This is not necessarily related to the cause of death and is, therefore, misleading.

Another reason to question the validity of the statistics is the wide range of predicted mortality rates allowed in several categories. HCFA states that the range is generated mathematically, adjusting such factors as age, sex, comorbid conditions, prior hospitalizations and transfer status. Yet a range from 0% to 68%, as shown in the Ophthalmologic Disease category, provides such a wide birth that placement within the boundaries is virtually meaningless.

Finally, statistics of any kind, to be useful, must be validated. In order to do that with HCFA's mortality data, each patient's medical record needs to be reviewed to verify the treatment and cause of death. At The United Hospital this is already done on every death as part of the medical staff's routine quality assurance activities. HCFA has also expressed their intention that by publishing this data, hospitals will have a place to start looking further in depth at the care given. We feel we are considerably past that point and the benefits we obtain from our normal review activities far outweigh those that might be obtained from this crude data. A quality review program needs to focus on all aspects of patient care. It should be designed to enhance patient safety, promote proper utilization of services and reduce the probability of preventable adverse clinical outcomes. We believe United Hospital has such a program in place and has the integrity to adequately address the results of its self-assessment.

Accredited by the Joint Commission on Accreditation of Hospitals

We recognize HCFA's interest in defining the quality of care afforded to our nations' Medicare patients and agree that publishing results of treatment places added weight on the achievement and maintenance of good quality care. However, we greatly regret the publishing of this mortality data and the promotion of it as a viable mechanism in comparing the quality of individual hospitals. The data is flawed in its present development, and always will be, as there are too many variables to be considered; variables which override the common denominators of "death in Medicare patients occurring within 30 days of the last hospital admission". Most importantly, there is no control over the information submitted to HCFA. Therefore, the validity of the data will always be in question, no matter how sophisticated it becomes. The value of HCFA's mortality data is negligible, misleading, and quite frankly, a waste of time and expense.

Submitted by:
Marvin R. Meier
Marvin R. Meier
Vice President of Information Services
October 23, 1987

UNITY HOSPITAL

164 West 13th St.
PHONE 352-1620
GRAFTON, NORTH DAKOTA
58237

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Hospital ID #350047

Dear Sirs:

We wish to comment on the Actual Mortality Rate of Renal Disease for those Medicare patients admitted to Unity Hospital in 1986.

The data presented shows an actual mortality rate of 100% for the four cases as identified as having Renal Disease. We agree that these individuals expired with a final diagnosis relating to Renal Disease, however, we would like to indicate for the record that all four of the cases had multiple diagnostic problems that ultimately contributed to the death of the patient.

Sincerely,

Dan E. Will

Dan E. Will
Administrator

DEW:mjb

Ohio

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ADAMS COUNTY HOSPITAL WEST UNION OH 45693	OH-17 *	459	16	11-20	21	38	13-52	21	33	12-49	17	12	6-45	35	29	12-40	22	64	24-64	18	11	7-46	57	28	12-35
AKRON CITY HOSPITAL AKRON OH 44309	OH-18 *	5425	12	9-15	502	27	20-34	167	28	21-36	87	18	11-30	273	27	17-29	164	40	29-46	57	18	8-31	485	20	16-27
AKRON GENERAL MEDICAL CTR AKRON OH 44307	OH-19	3829	12	8-15	293	23	17-32	107	24	19-37	104	15	11-29	163	23	15-29	139	37	28-46	78	18	11-33	244	17	14-26
ALLEN MEMORIAL HOSPITAL OBERLIN OH 44074	OH-20 *	422	14	10-19	35	17	15-46	24	25	12-47	11	18	8-57	35	17	10-37	12	50	18-69	17	12	8-48	51	25	11-35
ALLIANCE CITY HOSP ALLIANCE OH 44601	OH-21 *	1447	15	10-17	106	31	20-41	55	33	18-43	31	19	7-36	88	23	13-30	64	42	27-52	31	19	7-38	143	24	14-29
AMHERST HOSP AMHERST OH 44001	OH-22 *	352	9	8-17	21	14	7-43	8	50	7-64	11	0	6-54	18	22	7-45	8	25	12-71	12	17	5-51	49	20	12-36
ASHTABULA GENERAL HOSP ASHTABULA OH 44004	OH-23 *	1078	13	11-18	73	25	14-36	40	35	17-45	20	15	6-41	73	23	14-34	42	48	26-56	27	7	6-38	118	23	15-33
AULTMAN HOSPITAL CANTON OH 44710	OH-24 *	4996	11	9-15	355	23	19-33	178	24	22-36	103	25	12-30	259	21	16-27	197	37	29-45	56	21	9-33	407	16	13-24
BARBERTON CITIZENS HOSPITA BARBERTON OH 44203	OH-25	2577	12	9-15	149	23	16-34	85	36	18-38	65	18	11-33	135	27	16-31	108	45	30-50	53	8	7-31	253	19	14-27
BARNESVILLE HOSPITAL ASSOC BARNESVILLE OH 43713	OH-26 *	644	12	10-18	27	41	15-50	13	23	12-59	15	20	5-46	46	22	14-39	33	27	24-57	13	15	11-60	68	18	15-37
BELLEVUE HOSP BELLEVUE OH 44811	OH-27	350	7	9-18	34	24	16-48	13	31	9-55	6	0	2-64	20	0	8-44	11	45	19-72	2	0	3-91	30	7	7-36
BERGER HOSP CIRCLEVILLE OH 43113	OH-28	420	17	9-18	12	25	13-64	15	20	12-56	11	18	5-52	34	32	9-37	12	50	19-70	20	35	9-47	52	25	12-35
BETHESDA HOSP ASSOC ZANESVILLE OH 43701	OH-29 *	1661	10	8-15	124	23	17-36	56	23	16-40	38	18	8-35	74	22	13-33	59	34	25-50	29	14	7-38	179	14	12-26
BETHESDA HOSPITAL CINCINNATI OH 45206	OH-30	5479	13	10-16	589	49	24-37	188	21	22-37	85	20	12-32	334	18	17-27	171	41	31-47	71	23	9-31	399	16	15-26
BLANCHARD VALLEY HOSPITAL FINDLAY OH 45840	OH-31	1794	11	9-16	153	22	17-35	80	28	19-39	44	23	7-32	105	23	15-32	79	39	28-50	32	28	7-37	120	22	12-28
BLUFFTON COMM HOSP BLUFFTON OH 45817	OH-32 *	294	10	9-19	5	0	10-80	15	33	13-57	7	14	3-61	27	30	11-43	15	20	19-65	11	0	2-48	25	20	13-47
BOOTH MEMORIAL HOSPITAL CLEVELAND OH 44112	OH-33 *	15	13	1-36	.	.		1	0	0-97	.	-		.	.		.	.		1	100	2-98	.	-	
BRENTWOOD HOSP WARRENSVILLE HEIGHTS 44122	OH-34 *	1154	11	9-16	81	30	17-39	33	15	16-47	22	36	6-40	63	21	12-33	52	42	27-54	29	17	9-41	91	9	11-29
BROWN CO HOSP GEORGETOWN OH 45121	OH-35 *	568	10	10-18	34	21	17-49	13	23	9-56	8	13	2-56	47	17	12-36	20	35	23-64	22	27	12-51	56	11	13-36
BROWN MEMORIAL HOSPITAL CONNEAUT OH 44030	OH-36	508	13	10-18	25	20	17-53	17	53	14-56	6	17	2-64	26	27	11-43	25	36	21-58	9	0	2-53	69	23	12-33
BUCYRUS COMMUNITY HOSPITAL BUCYRUS OH 44820	OH-37 *	409	13	10-19	21	33	13-51	19	16	12-51	15	13	8-51	24	29	11-45	14	36	16-63	17	12	7-47	44	14	10-35
CHRIST HOSPITAL CINCINNATI OH 45219	OH-38	3790	8	7-13	303	20	19-34	83	18	19-40	40	15	8-35	137	18	15-30	98	31	26-47	41	24	11-40	184	19	14-28
CITY HOSPITAL BELLAIRE OH 43906	OH-39 *	737	13	9-17	49	27	13-39	22	27	13-50	13	23	3-46	40	25	12-38	50	38	25-52	15	20	5-46	75	17	12-32
CLERMONT COUNTY HOSPITAL BATAVIA OH 45103	OH-40	1297	11	8-14	49	20	12-38	30	30	13-44	21	29	6-41	62	19	13-35	49	47	24-51	15	40	11-56	135	21	12-28
CLEVELAND CLINIC HOSP CLEVELAND OH 44106	OH-41 *	6237	7	7-13	690	19	22-35	72	18	18-40	82	12	11-31	164	20	17-31	102	23	28-49	54	13	12-38	153	17	14-29
CLEVELAND METRO GEN HOSP CLEVELAND OH 44109	OH-42	2105	12	9-15	197	33	22-39	143	6	19-35	38	21	10-38	99	15	13-29	36	61	24-56	49	22	10-36	154	18	11-26

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ADAMS COUNTY HOSPITAL WEST UNION OH 45693	5	0	4-73	6	50	13-80	3	0	0-90	.	.		30	0	1-23	19	16	2-33	.	.		47	4	1-16	24	4	0-29
AKRON CITY HOSPITAL AKRON OH 44309	53	13	8-39	113	28	26-49	166	10	4-14	76	1	0-18	483	5	3-8	276	6	2-10	51	0	0-48	452	4	2-7	443	1	0-4
AKRON GENERAL MEDICAL CTR AKRON OH 44307	38	26	9-43	54	57	25-54	88	10	4-17	8	0	0-99	300	10	3-9	195	4	2-11	29	0	0-53	519	4	3-7	237	0	1-5
ALLEN MEMORIAL HOSPITAL OBERLIN OH 44074	2	50	0-93	5	20	8-78	12	0	1-43	.	.		45	9	1-16	17	6	0-37	7	0	0-100	24	0	1-25	16	6	0-38
ALLIANCE CITY HOSP ALLIANCE OH 44601	7	57	8-71	27	33	22-60	41	10	3-22	21	0	0-96	175	4	2-10	62	11	2-17	14	0	0-99	97	4	2-11	57	2	0-12
AMHERST HOSP AMHERST OH 44001	2	50	3-91	2	50	4-92	8	0	3-56	.			48	2	1-16	16	6	0-37	6	0	0-100	29	3	1-22	15	0	0-59
ASHTABULA GENERAL HOSP ASHTABULA OH 44004	17	6	7-52	25	40	20-59	25	0	4-32	.	.		98	6	2-12	52	8	1-18	15	0	0-99	80	0	2-13	30	3	0-21
AULTMAN HOSPITAL CANTON OH 44710	34	24	11-47	34	35	21-56	139	12	5-17	24	0	0-73	465	5	4-9	158	2	2-12	39	5	0-39	485	4	3-7	347	3	1-4
BARBERTON CITIZENS HOSPITA BARBERTON OH 44203	17	47	8-53	29	31	18-55	57	4	4-21	6	0	0-100	271	4	3-9	102	5	1-13	22	0	0-68	238	6	2-8	151	1	0-6
BARNESVILLE HOSPITAL ASSOC BARNESVILLE OH 43713	8	50	12-74	9	22	16-74	13	8	1-40	1	0	0-100	61	2	2-15	32	3	1-22	5	0	0-99	57	2	1-14	22	5	0-34
BELLEVUE HOSP BELLEVUE OH 44811	2	50	3-91	2	0	2-90	8	0	1-53	1	0	0-100	43	0	1-17	10	0	0-62	7	0	0-99	14	7	1-37	24	4	0-27
BERGER HOSP CIRCLEVILLE OH 43113	2	0	1-90	6	50	15-82	12	17	1-42	.			53	9	1-15	16	25	2-36	2	0	0-100	27	7	1-23	22	5	0-42
BETHESDA HOSP ASSOC ZANESVILLE OH 43701	20	20	12-56	7	14	8-70	55	9	4-21	12	0	0-99	162	4	2-10	75	8	2-15	13	0	0-88	131	5	2-9	87	1	0-9
BETHESDA HOSPITAL CINCINNATI OH 45206	39	38	12-47	47	28	23-53	165	7	4-15	143	1	0-6	499	5	3-8	250	5	3-12	43	0	0-50	409	2	3-7	379	2	0-4
BLANCHARD VALLEY HOSPITAL FINDLAY OH 45840	19	11	7-50	11	27	15-69	53	4	3-20	7	0	0-100	205	5	2-9	85	2	1-14	20	0	0-96	116	1	2-11	157	3	0-6
BLUFFTON COMM HOSP BLUFFTON OH 45817	4	0	0-77	3	33	10-91	4	25	0-76	.	.		41	2	1-19	5	0	0-72	5	0	0-100	12	0	0-42	13	0	0-72
BOOTH MEMORIAL HOSPITAL CLEVELAND OH 44112	.	.		.	.		.	.		.	.		.	.		.	.		1	0	0-100	1	0	0-100	6	0	0-100
BRENTWOOD HOSP WARRENSVILLE HEIGHTS 44122	10	10	5-58	18	28	17-61	19	5	2-34	3	0	0-100	147	2	2-11	39	10	1-21	12	0	0-51	109	5	2-10	73	1	0-10
BROWN CO HOSP GEORGETOWN OH 45121	7	57	6-69	5	60	8-78	7	0	1-58	.	.		75	0	1-13	34	0	1-21	5	0	0-100	51	4	2-16	16	0	0-41
BROWN MEMORIAL HOSPITAL CONNEAUT OH 44030	7	14	4-66	8	25	15-76	14	7	2-39	1	0	0-100	54	6	2-17	36	6	1-21	9	0	0-100	51	0	1-16	15	0	0-43
BUCYRUS COMMUNITY HOSPITAL BUCYRUS OH 44820	10	40	12-69	10	20	12-67	17	6	3-37		.		35	3	1-19	25	0	1-26	1	0	0-100	42	12	1-18	23	0	0-35
CHRIST HOSPITAL CINCINNATI OH 45219	56	21	9-39	18	39	23-68	61	3	3-18	73	0	0-16	246	5	4-11	142	4	2-12	52	2	0-22	484	5	3-7	322	1	0-4
CITY HOSPITAL BELLAIRE OH 43906	5	0	2-71	4	50	8-83	19	5	1-32	5	20	0-100	75	11	2-14	23	0	0-28	7	0	0-100	80	5	2-12	26	4	0-25
CLERMONT COUNTY HOSPITAL BATAVIA OH 45103	12	25	6-56	15	20	10-55	37	5	3-24	6	0	0-100	142	7	2-11	81	5	2-16	5	0	0-100	126	5	2-10	68	0	0-11
CLEVELAND CLINIC HOSP CLEVELAND OH 44106	59	5	3-34	11	36	16-70	28	4	3-29	147	1	0-5	361	7	5-11	183	2	1-10	65	0	0-23	1586	4	4-7	531	1	0-3
CLEVELAND METRO GEN HOSP CLEVELAND OH 44109	14	29	3-50	11	64	15-68	73	21	3-18	13	0	0-96	121	6	3-12	74	7	1-15	27	0	0-76	154	10	2-10	118	2	0-7

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CLINTON MEMORIAL HOSPITAL WILMINGTON OH 45177	OH-43	1156	13	10-17	79	30	18-41	35	26	19-50	25	20	9-43	66	17	14-35	45	60	27-56	20	25	10-49	88	25	13-31
COMM HOSP OF SPRINGFIELD SPRINGFIELD OH 45501	OH-44 *	1671	12	9-16	117	21	14-32	50	34	18-44	23	22	8-42	101	19	16-33	71	44	28-52	39	23	12-42	173	20	13-28
COMMUNITY HOSPITAL BRYAN OH 43506	OH-45 *	822	9	9-17	50	22	15-41	27	22	13-46	31	19	8-38	41	27	12-39	26	50	25-63	11	18	8-58	87	18	15-35
COMMUNITY HOSPITAL OF BEDF BEDFORD OH 44146	OH-46 *	879	12	9-17	57	16	12-37	30	43	18-51	13	8	3-46	66	24	15-36	26	46	22-59	20	10	6-43	84	20	12-31
COMMUNITY MEDCENTER HOSPIT MARION OH 43302	OH-47 *	825	9	7-15	46	13	14-41	23	26	13-49	12	42	8-56	43	30	13-39	19	21	21-63	8	13	4-60	63	22	9-30
COMMUNITY MEM HOSP HICKSVILLE OH 43526	OH-48 *	205	14	11-23	9	44	5-58	13	15	15-63	2	50	0-91	18	17	11-51	8	25	15-75	4	0	1-74	27	19	6-36
COSHOCTON COUNTY MEMORIAL COSHOCTON OH 43812	OH-49 *	786	15	10-18	42	40	16-45	32	34	16-47	27	26	6-37	78	26	15-34	40	35	25-55	21	10	5-40	51	24	10-33
CRESTLINE MEMORIAL HOSPITA CRESTLINE OH 44827	OH-50 *	110	21	7-21	3	33	2-82	1	0	0-99	2	0	0-90	4	50	3-75	3	33	5-86	7	0	2-60	19	42	10-49
CUYAHOGA FALLS GENERAL HOS CUYAHOGA FALLS OH 44223	OH-51	1213	14	9-16	56	32	17-42	41	12	16-44	37	8	4-29	84	21	13-31	31	45	20-53	29	24	6-36	112	29	15-32
DEACONESS HOSP CINCINNATI OH 45219	OH-52	2088	12	9-15	128	27	16-35	61	23	17-40	47	19	9-34	112	19	15-31	56	45	26-52	46	15	9-35	249	24	15-27
DEACONESS HOSP CLEVELAND OH 44109	OH-53	2555	10	9-15	155	19	17-35	78	24	19-40	33	12	7-36	194	22	17-30	84	35	28-50	43	9	8-34	208	21	15-28
DEFIANCE HOSPITAL INC DEFIANCE OH 43512	OH-54 *	853	12	9-17	42	24	13-41	29	21	14-46	12	17	4-49	50	34	12-36	21	33	17-57	29	24	12-46	123	20	14-30
DETTMER HOSPITAL INC TROY OH 45373	OH-55	558	10	8-16	40	25	12-41	25	24	16-52	9	22	4-56	28	25	9-39	20	45	21-62	12	25	2-47	35	11	11-40
DOCTORS HOSPITAL COLUMBUS OH 43201	OH-56	2433	11	7-14	143	21	16-34	58	33	17-41	62	15	8-29	116	21	15-31	77	38	25-47	51	29	8-34	194	19	11-24
DOCTORS HOSPITAL INC MASSILLON OH 44646	OH-57	1182	14	8-15	61	28	14-38	37	27	17-46	26	23	8-40	72	36	14-34	32	31	21-54	25	16	11-46	131	27	11-27
DOCTORS HOSPITAL OF NELSON NELSONVILLE OH 45764	OH-58	303	16	9-19	14	29	10-55	14	43	12-58	6	33	3-65	20	30	9-46	12	67	15-65	11	9	3-50	37	16	9-35
DUNLAP MEMORIAL HOSPITAL ORRVILLE OH 44667	OH-59 *	204	11	8-19	13	38	6-50	7	14	9-71	7	14	7-68	17	12	9-49	8	50	15-75	8	13	2-57	19	16	5-41
EAST LIVERPOOL CITY HOSPIT EAST LIVERPOOL OH 43920	OH-60	1301	14	10-17	61	41	17-42	57	26	18-42	22	14	3-35	94	28	15-33	65	35	26-51	31	35	8-38	111	24	13-30
EDWIN SHAW HOSPITAL AKRON OH 44312	OH-61 *	103	4	3-16	1	100	1-97	9	0	8-62	.	.		.	.		.	.		.	.		.	.	
ELYRIA MEMORIAL HOSPITAL ELYRIA OH 44035	OH-62	1923	11	9-16	100	37	19-40	61	30	17-41	37	30	10-39	133	21	16-32	71	28	26-50	48	31	16-44	160	17	10-24
EUCLID GENERAL HOSPITAL EUCLID OH 44117	OH-63 *	2579	13	10-17	200	19	17-34	102	30	21-39	56	14	10-34	188	29	18-32	90	34	30-51	35	23	12-43	198	25	16-30
FAIRVIEW GENERAL HOSPITAL CLEVELAND OH 44111	OH-64	3576	12	10-16	252	21	18-34	144	26	21-37	85	13	8-28	204	21	17-29	170	47	31-48	73	11	8-30	292	18	14-26
FAYETTE COUNTY MEMORIAL HO WASHINGTON COURT HOUSE OH 43160	OH-65	715	16	9-17	23	30	9-44	27	33	14-47	15	27	5-45	52	38	13-37	37	41	26-58	22	32	13-51	66	29	11-32
FIRELANDS COMMUNITY HOSPIT SANDUSKY OH 44870	OH-66 *	1211	12	8-15	84	29	20-42	23	39	13-49	22	23	5-38	57	14	13-35	45	44	26-55	43	16	11-39	88	18	10-28
FISHER TITUS MEM HOSPITAL NORWALK OH 44857	OH-67	813	14	9-16	70	24	14-37	24	38	12-47	13	8	3-46	61	31	14-36	46	43	25-53	21	24	6-41	57	16	9-31
FLOWER HOSP SYLVANIA OH 43610	OH-68 *	2085	11	9-15	191	25	17-33	54	30	19-44	30	13	8-39	118	21	15-31	73	40	28-52	19	16	7-44	229	14	13-26

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CLINTON MEMORIAL HOSPITAL WILMINGTON OH 45177	18	28	10-54	14	29	15-63	31	10	3-27	5	0	0-100	160	6	3-12	49	6	3-21	9	11	0-87	81	4	1-12	98	2	0-8
COMM HOSP OF SPRINGFIELD SPRINGFIELD OH 45501	16	19	6-52	23	17	25-66	33	9	4-27	9	0	0-97	144	3	3-11	111	1	1-12	12	0	0-99	147	2	2-10	94	2	0-8
COMMUNITY HOSPITAL BRYAN OH 43506	6	17	10-77	5	40	8-78	27	7	2-27	7	0	0-100	91	1	2-12	40	3	1-20	16	0	0-59	93	2	2-13	51	0	0-14
COMMUNITY HOSPITAL OF BEDF BEDFORD OH 44146	13	23	9-59	7	43	13-77	21	5	3-33	3	0	0-100	105	5	2-12	74	11	2-16	9	0	0-100	81	7	2-12	30	0	0-20
COMMUNITY MEDCENTER HOSPIT MARION OH 43302	4	25	12-89	1	0	1-97	15	13	2-37	4	0	0-100	60	8	2-17	53	6	1-17	1	0	0-100	98	2	2-11	59	2	0-13
COMMUNITY MEM HOSP HICKSVILLE OH 43526	18	11	13-59	6	33	10-76	2	50	0-97	.	.		23	0	0-26	7	14	0-59	3	0	0-100	11	9	0-45	6	0	0-98
COSHOCTON COUNTY MEMORIAL COSHOCTON OH 43812	6	17	5-71	3	33	2-83	22	14	2-30	1	0	0-100	104	5	2-12	36	14	2-24	9	0	0-94	78	5	2-13	24	4	0-29
CRESTLINE MEMORIAL HOSPITA CRESTLINE OH 44827	1	100	0-97	3	0	3-84	.	.		.	.		10	10	0-48	3	0	0-83	.	.		4	25	0-81	5	0	0-99
CUYAHOGA FALLS GENERAL HOS CUYAHOGA FALLS OH 44223	8	38	5-63	29	38	17-53	44	5	3-23	9	0	0-98	114	5	3-13	59	15	3-19	8	0	0-97	99	12	2-11	109	0	0-7
DEACONESS HOSP CINCINNATI OH 45219	13	23	10-60	22	23	17-57	54	11	3-20	36	0	0-39	191	8	3-11	103	10	3-15	5	0	0-100	180	2	2-9	142	3	0-6
DEACONESS HOSP CLEVELAND OH 44109	17	18	9-54	17	41	19-64	41	2	4-25	8	0	0-99	247	4	3-10	104	5	1-13	24	4	0-64	225	3	2-8	189	1	1-6
DEFIANCE HOSPITAL INC DEFIANCE OH 43512	8	25	5-64	14	57	24-73	23	22	5-35	10	0	0-98	111	3	1-11	39	3	2-21	16	0	0-97	48	2	1-16	38	0	0-25
DETTMER HOSPITAL INC TROY OH 45373	4	0	3-77	6	50	7-72	15	7	1-37	.	.		70	3	2-14	16	6	1-35	5	0	0-99	30	10	1-21	14	0	0-58
DOCTORS HOSPITAL COLUMBUS OH 43201	15	40	7-54	21	29	14-55	52	10	4-22	12	0	0-93	211	6	2-9	110	5	2-13	17	0	0-70	254	5	2-8	140	2	0-6
DOCTORS HOSPITAL INC MASSILLON OH 44646	3	33	2-83	8	25	13-73	25	8	4-32	7	0	0-100	96	7	2-12	73	8	2-16	6	0	0-100	96	5	2-11	153	4	0-6
DOCTORS HOSPITAL OF NELSON NELSONVILLE OH 45764	3	33	1-82	4	50	10-86	8	0	1-53	.	.		28	11	1-23	5	0	0-68	4	0	0-100	35	3	1-20	19	0	0-43
DUNLAP MEMORIAL HOSPITAL ORRVILLE OH 44667	2	50	1-90	1	100	1-97	9	22	2-51	.	.		19	0	1-30	6	0	0-74	3	0	0-100	9	0	0-54	23	0	0-39
EAST LIVERPOOL CITY HOSPIT EAST LIVERPOOL OH 43920	15	27	13-62	15	20	15-62	31	10	2-26	1	0	0-100	105	3	2-11	70	11	1-15	3	0	0-100	149	3	2-10	40	0	0-17
EDWIN SHAW HOSPITAL AKRON OH 44312	.	.		.	.		1	0	0-100	.	.		.	.		.	.		.	.		.	.			.	
ELYRIA MEMORIAL HOSPITAL ELYRIA OH 44035	24	8	8-47	14	29	16-64	38	11	2-23	6	0	0-100	192	4	3-10	73	3	1-14	13	0	0-87	284	6	3-8	103	0	0-8
EUCLID GENERAL HOSPITAL EUCLID OH 44117	15	40	15-64	21	43	22-64	75	11	5-21	3	0	0-100	251	4	3-10	125	9	3-14	24	4	0-31	214	4	2-9	124	2	1-8
FAIRVIEW GENERAL HOSPITAL CLEVELAND OH 44111	33	21	13-50	48	33	24-55	80	11	5-20	15	0	0-98	330	5	3-9	150	5	2-11	33	0	0-68	364	3	3-8	250	0	0-5
FAYETTE COUNTY MEMORIAL HO WASHINGTON COURT HOUSE OH 43160	5	40	6-77	9	33	9-65	27	7	3-29	.	.		88	5	2-13	30	3	1-23	10	0	0-100	63	10	2-15	31	6	0-20
FIRELANDS COMMUNITY HOSPIT SANDUSKY OH 44870	10	40	8-64	7	29	11-74	26	12	2-27	5	0	0-100	131	8	2-11	51	4	1-17	14	0	0-94	77	5	2-12	79	3	0-9
FISHER TITUS MEM HOSPITAL NORWALK OH 44857	8	38	5-64	1	100	1-97	22	5	2-31	5	0	0-100	93	2	2-12	61	3	1-16	7	0	0-100	71	11	2-14	28	0	0-25
FLOWER HOSP SYLVANIA OH 43610	10	30	10-66	13	62	20-71	45	2	3-21	46	0	0-36	175	3	3-10	106	2	2-13	13	0	0-100	98	3	2-11	237	0	0-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																					
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
FOSTORIA CITY HOSP FOSTORIA OH 44830	OH-69 *	567	8	9-17	26	19	12-46	19	32	14-55	11	9	5-53	44	18	11-36	17	18	20-64	15	7	4-46	79	11	10-28
FT HAMILTON HUGHES MEMORIA HAMILTON OH 45013	OH-70	1483	12	9-16	131	29	18-37	38	26	18-48	23	17	5-38	108	23	16-32	53	30	25-52	18	17	7-46	108	18	12-29
FULTON CO HEALTH CENTER WAUSEON OH 43567	OH-71	588	12	10-18	31	16	13-46	12	8	10-59	10	30	5-56	47	28	14-39	43	30	26-56	7	14	3-61	46	7	10-34
GALION COMMUNITY HOSPITAL GALION OH 44833	OH-72	684	12	8-16	21	24	8-45	29	10	14-46	20	10	6-42	38	34	13-40	32	38	22-55	7	14	2-61	79	22	11-30
GEAUGA COMM HOSP CHARDON OH 44024	OH-73 *	1004	13	9-16	59	27	13-37	33	21	16-47	31	16	6-35	67	25	15-35	42	40	24-54	17	18	6-45	92	30	13-31
GOOD SAMARITAN HOSPITAL CINCINNATI OH 45220	OH-74 *	2508	12	8-14	135	27	16-35	58	33	17-41	52	25	10-34	116	28	16-33	59	42	24-50	42	14	7-34	212	26	14-28
GOOD SAMARITAN HOSPITAL & DAYTON OH 45406	OH-75 *	4283	10	9-15	276	18	17-32	113	20	19-37	76	12	9-29	241	22	17-29	206	33	30-46	79	23	12-34	278	18	14-26
GOOD SAMARITAN MEDICAL CEN ZANESVILLE OH 43701	OH-76	1755	13	9-16	159	25	15-33	49	27	17-43	44	14	7-32	82	33	14-33	73	44	27-50	29	17	8-40	232	19	13-26
GRACE HOSP CLEVELAND OH 44113	OH-77	218	12	7-18	6	17	5-69	2	50	3-91	9	11	2-53	18	17	8-47	1	0	1-97	3	0	0-84	45	27	11-37
GRADY MEMORIAL HOSP DELAWARE OH 43015	OH-78 *	829	14	11-18	50	32	13-39	25	48	17-53	13	15	6-50	60	20	15-37	35	34	23-55	18	33	11-52	113	20	13-30
GRANDVIEW HOSP DAYTON OH 45405	OH-79	2146	11	8-15	121	27	17-36	65	31	19-42	38	24	9-37	118	18	15-31	79	42	28-51	51	22	10-36	164	15	12-26
GRANT HOSPITAL COLUMBUS OH 43215	OH-80	3155	11	8-14	245	23	19-35	82	22	17-38	38	21	10-37	137	23	15-30	103	41	28-49	58	21	10-34	202	20	13-27
GREENE MEMORIAL HOSPITAL XENIA OH 45385	OH-81	1045	15	9-16	58	31	12-37	47	19	17-43	34	26	11-41	83	27	13-32	35	43	22-54	25	12	6-38	89	22	12-30
GREENFIELD AREA MEDICAL CT GREENFIELD OH 45123	OH-82 *	254	11	6-15	6	50	7-71	5	40	7-76	5	20	1-68	14	21	7-49	3	33	5-86	10	20	3-52	25	28	7-39
GUERNSEY MEMORIAL HOSPITAL CAMBRIDGE OH 43725	OH-83	1232	15	11-18	66	24	13-36	50	20	18-44	35	17	8-36	62	21	13-34	63	46	29-54	23	9	5-38	188	24	17-31
H B MAGRUDER MEM HOSP PORT CLINTON OH 43452	OH-84	696	9	7-15	37	16	13-42	18	33	12-52	11	9	1-47	34	12	12-41	33	39	24-57	6	17	1-63	56	14	10-31
HARDIN MEM HOSP KENTON OH 43326	OH-85	356	15	10-19	19	21	8-46	18	33	12-52	14	29	4-46	27	19	10-41	13	38	16-65	6	50	4-68	35	14	11-39
HARRISON COMMUNITY HOSPITA CADIZ OH 43907	OH-86 *	392	18	11-20	19	37	11-51	19	47	15-56	11	18	7-56	23	0	10-45	17	35	19-63	15	20	9-53	45	27	11-36
HENRY COUNTY HOSPITAL NAPOLEON OH 43545	OH-87 *	300	16	9-19	23	30	13-50	13	46	12-60	4	25	3-76	14	29	11-55	13	54	19-69	8	13	4-59	32	28	11-41
HIGHLAND DISTRICT HOSP HILLSBORO OH 45133	OH-88 *	283	16	9-19	18	44	6-43	17	35	12-54	7	14	4-62	15	13	6-46	13	31	16-65	9	0	4-57	41	27	11-37
HILLCREST HOSPITAL MAYFIELD HEIGHTS OH 44124	OH-89 *	3188	12	10-16	259	24	17-33	122	34	22-39	84	12	8-27	198	23	19-32	145	34	31-49	47	19	9-35	248	19	15-27
HOCKING VALLEY COMMUNITY H LOGAN OH 43138	OH-90 *	487	16	11-19	22	41	8-44	16	25	9-50	17	24	4-41	42	19	13-39	29	55	27-63	12	8	2-47	79	16	11-30
HOLZER MEDICAL CENTER GALLIPOLIS OH 45631	OH-91	1362	13	10-17	102	25	16-36	52	17	18-44	25	8	9-42	88	25	14-32	50	48	24-52	68	19	13-37	147	19	14-30
HURON RD HOSP CLEVELAND OH 44112	OH-92	1343	15	10-17	91	29	16-37	48	33	16-42	43	28	9-35	82	29	15-34	41	39	25-55	43	21	10-37	108	36	16-33
JEWISH HOSP CINCINNATI OH 45229	OH-93 *	4142	10	8-14	317	25	17-32	108	31	20-38	123	14	10-27	181	18	17-31	116	35	30-49	55	9	6-27	322	19	15-27
JOEL POMERENE MEMORIAL HOS MILLERSBURG OH 44654	OH-94	250	16	7-17	19	26	11-51	10	40	10-62	5	0	0-70	18	28	8-46	10	20	12-66	3	67	2-82	27	41	7-37

*Written Comments Not Submitted

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
FOSTORIA CITY HOSP FOSTORIA OH 44830	7	14	6-69	3	33	5-86	10	0	1-47	.	.		69	3	2-14	17	12	1-33	6	0	0-100	59	0	1-14	28	0	0-24
FT HAMILTON HUGHES MEMORIA HAMILTON OH 45013	11	36	12-66	12	58	24-76	32	6	2-25	2	0	0-100	148	3	2-11	51	4	1-17	14	0	0-99	98	1	2-11	62	2	0-12
FULTON CO HEALTH CENTER WAUSEON OH 43567	6	50	8-75	2	50	4-92	20	20	2-33	.	.		75	1	3-16	29	7	1-24	3	0	0-100	46	2	1-17	29	10	0-21
GALION COMMUNITY HOSPITAL GALION OH 44833	7	43	4-66	6	50	11-78	21	5	2-31	13	8	0-94	81	2	2-13	22	5	1-28	4	0	0-100	63	8	2-14	62	0	0-12
GEAUGA COMM HOSP CHARDON OH 44024	6	50	11-79	8	38	10-70	22	5	2-30	6	0	0-100	105	6	2-12	43	12	1-19	11	0	0-93	79	5	2-12	115	3	0-7
GOOO SAMARITAN HOSPITAL CINCINNATI OH 45220	44	27	11-45	19	53	16-59	40	5	3-24	9	0	0-100	163	4	2-9	98	8	2-15	14	0	0-41	307	5	3-8	166	2	0-6
GOOO SAMARITAN HOSPITAL & OAYTON OH 45406	29	21	8-46	48	35	26-56	115	8	5-18	17	0	0-80	395	5	3-9	210	6	3-12	38	0	0-44	662	3	3-7	251	2	1-5
GOOO SAMARITAN MEOICAL CEN ZANESVILLE OH 43701	9	22	9-67	27	22	18-56	46	11	3-21	10	0	0-100	181	7	2-10	71	7	1-15	17	0	0-86	102	6	2-11	106	3	0-7
GRACE HOSP CLEVELANO OH 44113	5	20	2-71	2	50	5-93	4	25	0-81	.	.		39	5	1-18	4	0	0-78	3	0	0-100	6	0	0-76	6	0	0-99
GRAOY MEMORIAL HOSP OELAWARE OH 43015	12	42	13-66	6	33	8-74	21	19	5-37	2	0	0-100	80	6	3-15	42	2	3-23	4	0	0-99	69	4	2-13	41	2	0-16
GRANOVIEW HOSP OAYTON OH 45405	12	17	6-56	28	43	23-61	54	11	4-21	10	0	0-95	245	5	3-10	69	3	1-14	21	10	0-72	189	3	2-8	166	2	0-6
GRANT HOSPITAL COLUMBUS OH 43215	18	22	7-51	42	21	23-54	67	15	3-19	275	0	0-3	273	5	3-9	119	8	2-13	18	0	0-53	403	5	3-8	140	2	0-6
GREENE MEMORIAL HOSPITAL XENIA OH 45385	9	44	6-63	11	55	15-68	44	11	3-23	7	0	0-99	79	9	1-12	40	0	1-19	11	0	0-100	93	6	2-12	45	0	0-16
GREENFIELO AREA MEOICAL CT GREENFIELO OH 45123	5	20	2-71	.	.		2	0	0-93	.	.		27	7	1-23	6	17	0-68	.	.		24	4	1-25	9	0	0-88
GUERNSEY MEMORIAL HOSPITAL CAMBRIOGE OH 43725	10	10	10-66	22	32	21-62	37	8	2-23	1	0	0-100	131	7	3-12	47	0	1-18	10	0	0-100	142	8	2-10	38	5	0-17
H B MAGRUOER MEM HOSP PORT CLINTON OH 43452	8	0	6-65	4	100	13-89	9	0	1-50	.	.		81	5	2-14	32	6	1-22	6	0	0-100	76	3	1-12	50	0	0-16
HAROIN MEM HOSP KENTON OH 43326	8	50	7-66	8	25	15-75	14	0	3-41	.	.		41	7	1-19	20	5	1-30	4	0	0-100	23	17	1-26	13	0	0-86
HARRISON COMMUNITY HOSPITA CAOIZ OH 43907	5	60	7-78	3	67	5-86	12	8	2-43	.	.		35	11	1-20	21	24	2-31	2	0	0-100	42	5	1-17	11	0	0-82
HENRY COUNTY HOSPITAL NAPOLEON OH 43545	3	0	1-82	2	50	4-92	15	13	1-36	.	.		30	10	1-21	13	0	0-45	4	0	0-100	15	0	0-36	25	0	0-28
HIGHLANO OISTRICT HOSP HILLSBORO OH 45133	3	67	6-87	2	0	2-90	3	0	0-88	.	.		36	6	1-19	10	0	2-49	.	.		16	6	0-34	10	10	0-65
HILLCREST HOSPITAL MAYFIELO HEIGHTS OH 44124	21	29	8-49	20	20	21-64	114	4	5-17	27	0	0-71	332	5	4-10	206	3	1-10	50	2	0-41	238	4	3-9	252	0	1-5
HOCKING VALLEY COMMUNITY H LOGAN OH 43138	6	67	7-74	18	17	14-57	7	0	1-58	.	.		63	3	2-15	14	7	0-42	3	0	0-100	36	8	1-19	10	0	0-82
HOLZER MEOICAL CENTER GALLIPOLIS OH 45631	7	29	7-69	9	44	12-69	28	0	4-31	3	0	0-100	135	6	2-11	82	6	2-15	10	0	0-100	104	2	2-12	65	3	0-11
HURON RO HOSP CLEVELANO OH 44112	15	7	5-51	18	50	20-64	25	12	3-30	5	0	0-100	90	10	2-13	66	8	2-16	3	0	0-100	154	5	2-10	61	2	0-11
JEWISH HOSP CINCINNATI OH 45229	24	33	13-55	31	45	23-59	84	7	3-16	85	0	0-15	386	4	3-8	205	7	3-12	38	0	0-19	377	6	3-8	237	1	0-5
JOEL POMERENE MEMORIAL HOS MILLERSBURG OH 44654	1	100	1-97	3	0	3-83	18	11	1-33	.	.		39	5	1-18	13	15	0-41	3	0	0-100	20	0	0-29	2	0	0-100

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
JOINT TOWNSHIP OIST MEMO H SAINT MARYS OH 45885	OH-95 *	508	12	10-18	43	33	15-43	11	36	10-61	11	27	8-58	45	18	13-38	13	15	18-68	17	29	8-49	35	20	12-41
KAISER FOUNDATION HOSP CLEVELANO OH 44104	OH-96 *	128	9	6-18	12	33	5-51	6	0	5-69	6	33	1-63	9	11	4-56	2	0	3-91	2	50	2-90	7	14	4-62
KAISER FOUNOATION HOSP PARMA OH 44130	OH-97	801	13	8-16	97	37	17-37	24	21	13-49	21	24	5-39	32	34	12-42	35	29	21-52	16	6	7-48	71	11	10-30
KETTERING HOSP LOUDONVILLE OH 44842	OH-98 *	149	21	9-21	6	50	5-68	3	0	5-86	9	22	4-55	8	25	6-62	18	33	22-65	4	75	1-74	10	50	4-53
KETTERING MEOICAL CENTER KETTERING OH 45429	OH-99	3458	9	8-14	240	19	18-34	96	22	20-39	80	11	9-29	184	24	17-30	128	45	27-45	46	9	8-34	233	19	15-28
KNOX COMM HOSP MOUNT VERNON OH 43050	OH-100*	1056	13	9-16	67	28	13-36	41	34	15-43	19	26	5-40	64	31	12-32	52	46	25-52	23	17	9-45	116	16	11-27
LAKE HOSPITAL SYSTEM INC PAINESVILLE OH 44077	OH-101	2701	13	10-17	196	29	19-36	114	32	21-39	71	24	14-36	209	24	16-29	119	30	28-47	78	19	10-32	281	20	14-26
LAKEWOOO HOSP LAKEWOOD OH 44107	OH-102	2188	11	9-16	145	32	18-37	73	26	19-40	50	16	10-35	161	23	17-31	77	36	29-52	28	7	8-41	212	14	14-27
LANCASTER-FAIRFIELO CTY HO LANCASTER OH 43130	OH-103*	1748	13	10-16	131	18	16-34	80	29	19-39	42	19	8-34	115	24	15-31	73	40	28-51	35	17	10-41	185	19	13-27
LAWRENCE CO GEN HOSP IRONTON OH 45638	OH-104	770	12	8-16	31	29	10-40	26	50	15-50	11	9	2-47	37	27	11-38	44	45	28-58	28	7	5-36	63	17	9-29
LICKING MEMORIAL HOSP NEWARK OH 43055	OH-105	2120	13	9-16	166	17	13-30	82	34	19-40	69	23	9-29	101	22	14-31	123	43	30-49	63	10	8-30	175	16	12-25
LIMA MEM HOSP LIMA OH 45804	OH-106*	2421	10	9-15	174	28	17-34	88	25	18-38	48	13	12-37	148	22	17-32	74	41	28-51	50	18	11-38	185	13	12-26
LODI COMM HOSP LOOI OH 44254	OH-107*	220	9	8-18	15	33	9-52	5	20	8-77	3	0	0-84	21	14	9-44	13	23	19-68	2	0	1-89	17	12	5-43
LORAIN COMMUNITY HOSPITAL LORAIN OH 44052	OH-108	1154	10	8-15	53	23	14-40	43	23	15-42	20	30	6-42	60	25	12-33	32	41	22-55	13	23	8-54	112	15	10-26
LUTHERAN MEOICAL CENTER CLEVELANO OH 44113	OH-109*	1429	11	9-16	104	27	20-41	25	32	14-48	27	19	7-39	74	19	12-31	27	37	24-60	34	24	9-39	117	16	15-32
MADISON COUNTY HOSPITAL IN LONOON OH 43140	OH-110*	459	12	9-17	21	33	12-50	19	21	12-52	11	9	7-56	21	38	10-46	25	40	20-58	15	0	1-41	34	24	11-40
MANSFIELO GEN HOSP MANSFIELO OH 44903	OH-111	2347	13	8-14	207	30	18-35	91	32	18-38	37	22	7-34	80	31	14-33	83	34	27-49	44	27	8-35	131	21	12-27
MARIETTA MEMORIAL HOSPITAL MARIETTA OH 45750	OH-112*	1327	14	10-17	113	29	18-37	43	42	16-43	33	18	9-38	85	27	14-33	54	46	25-51	14	29	4-47	146	18	14-29
MARION GENERAL HOSPITAL MARION OH 43302	OH-113	1104	15	9-16	84	24	14-36	30	57	15-48	27	26	11-44	58	29	14-36	57	60	28-54	13	8	4-48	85	27	15-34
MARTINS FERRY HOSP MARTINS FERRY OH 43935	OH-114	1152	12	9-16	80	36	17-39	29	21	13-46	29	14	7-37	67	27	14-34	37	46	27-58	21	5	4-38	114	18	14-31
MARY RUTAN HOSPITAL BELLEFONTAINE OH 43311	OH-115	883	9	9-17	43	16	11-39	40	13	17-45	16	6	7-48	64	28	14-36	36	33	24-56	23	30	10-47	101	10	11-28
MARYMOUNT HOSPITAL GARFIELO HEIGHTS 44125	OH-116	1811	12	9-16	122	32	19-38	53	17	17-42	41	24	9-36	145	18	16-31	70	36	29-53	25	20	5-37	131	23	15-31
MASSILLON COMMUNITY HOSPIT MASSILLON OH 44646	OH-117	1432	9	9-15	88	16	14-35	59	24	18-42	33	12	6-34	74	18	13-33	70	43	28-52	22	18	6-42	114	12	12-29
MCCULLOUGH-HYOE MEM HOSP I OXFORO OH 45056	OH-118	536	12	9-17	32	34	12-43	22	23	14-51	12	25	6-52	33	15	10-39	16	44	18-63	8	0	3-58	64	11	11-32
MEDICAL CENTER HOSPITAL CHILLICOTHE OH 45601	OH-119*	1328	13	9-16	81	27	15-36	46	43	17-44	31	23	7-36	97	24	13-31	65	35	26-50	28	11	5-36	121	17	11-27
MEOICAL COLLEGE OF OHIO AT TOLEOO OH 43699	OH-120*	1271	12	9-16	126	25	20-39	30	43	13-44	24	0	8-42	43	16	14-41	44	43	25-54	35	31	9-39	70	26	12-33

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
JOINT TOWNSHIP OIST MEMO H SAINT MARYS OH 45885	5	40	6-77	8	38	16-77	13	8	1-40	.	.		49	8	2-17	34	9	1-21	5	0	0-98	52	4	2-16	42	0	0-16
KAISER FOUNOATION HOSP CLEVELANO OH 44104	4	25	1-76	1	0	0-97	2	0	0-91	.	.		11	0	0-47	7	0	0-78	1	0	0-100	8	0	0-68	12	0	0-78
KAISER FOUNOATION HOSP PARMA OH 44130	4	0	1-76	6	50	5-70	14	21	1-38	.	.		85	2	1-11	45	11	1-18	21	0	0-98	76	1	1-12	30	0	0-27
KETTERING HOSP LOUDONVILLE OH 44842	2	100	0-90	.	.		6	0	0-65	.	.		10	0	0-57	7	14	0-78	2	0	0-98	10	0	0-49	5	0	0-98
KETTERING MEOICAL CENTER KETTERING OH 45429	14	21	4-51	13	38	23-74	76	11	4-19	76	1	0-12	298	3	3-9	159	3	1-11	43	0	0-73	573	5	3-7	235	0	0-5
KNOX COMM HOSP MOUNT VERNON OH 43050	11	36	10-64	3	67	5-86	47	2	3-22	2	0	0-100	116	5	2-12	77	4	1-14	11	0	0-94	105	4	2-10	65	3	0-11
LAKE HOSPITAL SYSTEM INC PAINESVILLE OH 44077	12	0	7-58	22	23	19-60	94	7	4-18	11	0	0-100	292	5	3-9	138	5	1-11	21	5	0-43	203	2	2-9	164	2	1-6
LAKEWOOO HOSP LAKEWOOO OH 44107	14	21	8-56	16	19	19-65	62	10	4-20	30	0	0-65	182	8	3-11	75	8	1-14	10	0	0-95	216	1	2-9	156	1	0-6
LANCASTER-FAIRFIELO CTY HO LANCASTER OH 43130	14	43	11-60	22	45	16-57	65	6	4-20	5	0	0-100	190	4	2-9	97	2	1-13	25	0	0-91	142	3	2-9	100	4	0-8
LAWRENCE CO GEN HOSP IRONTON OH 45638	6	17	5-71	12	42	10-59	25	12	4-31	1	0	0-100	89	3	1-12	37	5	3-24	8	0	0-100	87	2	2-12	37	0	0-23
LICKING MEMORIAL HOSP NEWARK OH 43055	12	33	8-60	13	31	14-63	69	9	5-21	10	0	0-99	254	3	2-9	110	5	1-12	24	0	0-87	167	7	2-9	90	6	0-9
LIMA MEM HOSP LIMA OH 45804	22	9	13-56	14	36	17-66	75	5	3-17	10	0	0-100	234	3	3-9	89	6	1-14	29	0	0-69	217	1	3-10	252	1	0-5
LOOI COMM HOSP LOOI OH 44254	1	100	0-98	1	0	0-97	4	25	0-77	.	.		34	3	1-21	3	0	0-92	3	0	0-100	24	4	1-25	9	0	0-89
LORAIN COMMUNITY HOSPITAL LORAIN OH 44052	14	21	7-55	7	14	11-74	16	6	2-36	9	0	0-99	77	5	2-14	48	10	1-17	8	13	0-100	76	7	2-15	96	0	0-8
LUTHERAN MEOICAL CENTER CLEVELANO OH 44113	9	33	7-64	15	27	14-61	20	20	2-33	17	6	0-97	91	8	3-15	78	5	2-15	6	0	0-100	108	6	2-10	79	1	0-9
MAOISON COUNTY HOSPITAL IN LONDON OH 43140	5	0	2-71	12	17	12-62	14	14	1-39	.	.		46	4	1-17	21	0	1-29	9	0	0-58	35	11	1-19	26	0	0-31
MANSFIELO GEN HOSP MANSFIELD OH 44903	17	18	8-52	12	17	12-62	72	7	3-17	16	0	0-98	190	6	2-9	118	0	0-12	31	0	0-89	200	13	3-9	140	3	0-6
MARIETTA MEMORIAL HOSPITAL MARIETTA OH 45750	14	50	11-60	12	25	15-67	41	7	2-21	4	0	0-99	159	5	2-10	76	3	1-14	13	0	0-96	97	1	2-11	65	2	0-11
MARION GENERAL HOSPITAL MARION OH 43302	13	8	8-58	10	50	15-71	27	11	2-28	2	0	0-100	106	8	2-11	67	3	1-15	8	0	0-100	109	8	3-12	75	0	0-10
MARTINS FERRY HOSP MARTINS FERRY OH 43935	9	67	6-63	20	25	16-57	25	8	1-27	24	0	0-56	101	4	2-13	58	5	2-18	7	0	0-95	105	4	2-11	62	0	0-12
MARY RUTAN HOSPITAL BELLEFONTAINE OH 43311	12	25	4-54	6	33	10-77	23	4	5-35	1	0	0-100	91	5	2-12	46	4	1-18	6	0	0-88	98	2	2-11	58	2	0-12
MARYMOUNT HOSPITAL GARFIELO HEIGHTS 44125	13	46	10-61	11	36	17-71	37	11	3-25	8	0	0-100	173	9	3-11	82	2	2-15	14	0	0-60	150	1	2-10	97	3	0-8
MASSILLON COMMUNITY HOSPIT MASSILLON OH 44646	14	14	8-57	5	20	9-79	42	7	4-26	3	0	0-100	145	3	2-11	50	4	1-18	8	0	0-100	126	2	2-11	165	1	0-6
MCCULLOUGH-HYOE MEM HOSP I OXFORO OH 45056	7	0	8-71	5	40	11-82	19	0	1-32	2	0	0-100	56	5	1-14	25	8	1-26	10	0	0-97	45	0	1-17	16	6	0-48
MEOICAL CENTER HOSPITAL CHILLICOTHE OH 45601	14	36	10-59	20	30	16-58	42	5	3-24	6	0	0-100	129	4	2-10	42	5	2-20	9	0	0-100	85	5	1-12	49	0	0-14
MEOICAL COLLEGE OF OHIO AT TOLEOO OH 43699	16	19	7-52	5	40	12-83	20	15	2-33	14	7	0-61	72	7	3-17	47	4	1-18	8	13	0-67	104	13	2-12	73	3	0-10

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	Comment/ Reference	Overall			High Risk Diagnostic Categories: Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MEOINA COMMUNITY HOSP MEOINA OH 44256	OH-121*	1017	15	11-18	63	33	18-43	41	49	20-49	30	20	8-38	69	28	16-37	47	30	28-56	23	4	4-37	106	22	14-32
MEMORIAL HOSPITAL OF GENEV GENEVA OH 44041	OH-122*	459	14	9-18	23	39	10-45	22	41	16-54	13	8	3-46	28	29	12-43	12	58	16-67	19	26	10-50	29	17	10-40
MEMORIAL HOSPITAL OF SANOU FREMONT OH 43420	OH-123	1056	13	9-16	53	13	13-38	42	24	16-44	18	22	8-47	60	32	13-34	49	47	28-56	19	16	8-47	91	21	13-31
MEMORIAL HOSPITAL OF UNION MARYSVILLE OH 43040	OH-124*	539	14	9-17	31	42	14-47	24	50	13-49	22	18	5-37	36	31	11-39	29	52	27-63	8	25	5-62	46	9	9-34
MERCER CO JOINT TOWNSHIP C COLOWATER OH 45828	OH-125*	641	11	8-16	24	17	12-48	18	22	13-54	24	25	6-39	37	24	12-39	18	44	22-65	27	11	8-41	57	21	11-33
MERCY HOSP COLUMBUS OH 43207	OH-126	1006	10	8-15	39	41	17-47	28	32	15-48	14	0	6-48	54	22	12-34	35	31	19-50	30	20	10-42	134	16	11-26
MERCY HOSP HAMILTON OH 45011	OH-127	2534	13	8-15	151	23	17-35	82	38	20-40	59	25	8-30	167	28	15-29	80	46	25-47	33	30	8-37	212	21	13-26
MERCY HOSP TIFFIN OH 44883	OH-128	983	11	9-17	40	33	13-42	31	32	15-46	21	24	6-41	80	31	16-36	45	40	27-56	25	16	8-43	82	16	11-30
MERCY HOSP TOLEDO OH 43624	OH-129	2342	9	8-14	163	23	18-36	71	18	17-39	53	13	8-32	150	19	16-30	58	38	24-50	78	12	9-31	148	18	12-27
MERCY HOSPITAL PORTSMOUTH OH 45662	OH-130	1707	13	9-16	91	26	16-37	52	27	18-43	24	25	5-37	125	20	15-31	78	44	26-49	49	20	11-37	191	24	13-27
MERCY MEO CTR OF SPRINGFIE SPRINGFIELD OH 45501	OH-131*	2437	12	8-15	194	24	16-33	92	28	19-39	41	12	6-31	138	24	16-31	79	48	29-52	60	18	8-32	185	22	13-26
MERCY MEM HOSP URBANA OH 43078	OH-132*	650	11	9-17	37	27	15-45	26	31	13-47	22	5	4-37	38	26	13-40	23	35	20-59	22	5	5-40	63	11	11-33
MIAMI VALLEY HOSP OAYTON OH 45409	OH-133	4140	10	8-14	289	20	15-30	132	21	21-37	99	20	11-30	181	20	16-29	143	40	29-47	80	20	9-30	287	22	15-27
MIOOLETOWN HOSP ASSN MIDOLETOWN OH 45042	OH-134	2396	12	8-15	158	16	15-32	74	22	18-39	43	19	8-34	143	25	17-32	81	60	28-51	35	14	8-36	243	24	13-25
MOLLY STARK HOSPITAL LOUISVILLE OH 44641	OH-135*	12	0	0-51	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
MORROW CO HOSP MOUNT GILEAD OH 43338	OH-136	308	16	11-21	15	33	12-57	16	44	14-58	11	27	4-51	25	24	12-46	12	67	15-65	8	13	2-56	46	22	11-36
MT CARMEL HEALTH COLUMBUS OH 43222	OH-137	6310	13	9-15	470	20	18-32	197	27	21-35	138	17	11-28	320	25	17-28	295	42	29-43	163	25	13-31	448	22	15-25
MT SINAI MEOICAL CTR CLEVELANO OH 44106	OH-138	3147	10	9-15	251	26	17-33	90	16	19-38	78	18	10-30	150	11	17-32	95	42	29-51	74	26	13-36	224	13	14-28
NORTHEASTERN OHIO GENERAL MADISON OH 44057	OH-139	367	11	9-18	10	40	8-61	12	58	13-63	7	43	4-63	34	29	15-44	11	18	19-73	8	13	6-63	51	20	13-37
O BLENESS MEMORIAL HOSPITA ATHENS OH 45701	OH-140*	607	13	9-17	39	28	10-38	23	30	15-51	16	25	8-49	41	29	14-40	24	29	21-58	14	21	4-46	64	23	10-31
OAK HILL COMM MEOICAL CTR OAK HILL OH 45656	OH-141	287	12	9-18	12	33	7-54	15	40	10-54	7	43	3-61	25	16	12-45	14	43	22-70	9	33	2-54	44	16	7-30
OHIO STATE UNIVERSITY HOSP COLUMBUS OH 43210	OH-142*	3318	7	7-14	413	15	19-33	34	26	15-45	41	10	8-34	99	13	14-31	85	25	25-47	50	8	7-32	132	10	14-30
OHIO VALLEY HOSPITAL STEUBENVILLE OH 43952	OH-143	1294	14	10-17	81	31	18-41	47	26	15-41	37	22	6-32	87	33	15-33	59	49	28-54	53	13	8-33	122	19	15-32
OTTO C EPP MEMORIAL HOSPIT CINCINNATI OH 45236	OH-144*	342	13	7-16	18	17	7-45	14	14	10-55	3	0	1-81	8	13	4-58	20	65	21-62	11	9	7-57	37	24	7-32
OUR LADY OF MERCY HOSP CINCINNATI OH 45227	OH-145	2080	11	9-16	160	26	18-35	93	24	18-38	42	17	9-35	116	20	15-31	72	46	28-52	25	12	9-44	166	14	13-27
PARKVIEW HOSPITAL TOLEDO OH 43624	OH-146	732	11	7-15	48	40	13-39	27	52	16-50	16	6	5-44	35	23	11-39	15	20	16-62	21	5	7-43	58	10	8-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
HOSPITALS Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MEOINA COMMUNITY HOSP MEOINA OH 44256	6	83	10-77	24	38	20-59	36	19	2-23	3	0	0-100	113	8	3-14	41	0	1-20	11	0	0-95	96	1	2-11	75	4	1-10
MEMORIAL HOSPITAL OF GENEV GENEVA OH 44041	6	50	6-72	12	17	15-66	12	8	1-42	.	.		62	11	2-17	21	0	1-29	3	0	0-100	57	2	1-14	8	0	0-80
MEMORIAL HOSPITAL OF SANOU FREMONT OH 43420	11	27	8-60	12	42	18-71	38	13	2-23	13	0	0-99	143	6	2-10	53	9	3-20	10	0	0-98	61	3	1-14	70	4	0-10
MEMORIAL HOSPITAL OF UNION MARYSVILLE OH 43040	.	.		1	0	0-97	22	14	4-34	11	0	0-82	57	2	2-16	27	4	1-25	3	0	0-100	55	5	1-14	27	0	0-27
MERCER CO JOINT TOWNSHIP C COLDWATER OH 45828	7	29	10-74	10	20	14-69	17	12	1-33	1	0	0-100	70	3	2-14	40	0	1-19	7	0	0-99	53	13	2-16	42	0	0-16
MERCY HOSP COLUMBUS OH 43207	10	30	5-59	5	20	8-77	23	4	3-31	1	0	0-100	126	4	2-11	22	5	1-29	8	0	0-95	113	1	2-11	68	4	0-11
MERCY HOSP HAMILTON OH 45011	15	33	18-68	54	30	21-49	76	9	3-17	13	0	0-99	270	4	2-9	140	4	1-11	12	0	0-100	211	2	2-8	179	2	0-5
MERCY HOSP TIFFIN OH 44883	2	0	5-94	12	33	20-72	44	7	3-22	3	0	0-100	97	2	2-12	42	5	2-20	5	0	0-100	109	3	2-11	74	0	0-10
MERCY HOSP TOLEDO OH 43624	31	29	7-43	18	28	18-62	26	12	4-32	15	0	0-92	293	2	3-9	137	5	2-12	14	7	0-73	163	6	2-9	157	1	0-6
MERCY HOSPITAL PORTSMOUTH OH 45662	18	33	11-56	22	41	17-57	32	6	2-24	4	0	0-100	192	6	2-10	88	2	2-14	14	0	0-99	164	3	2-9	96	3	0-8
MERCY MED CTR OF SPRINGFIE SPRINGFIELO OH 45501	26	23	10-49	27	30	21-58	72	10	3-18	11	9	0-99	242	5	2-8	96	3	1-13	15	13	0-95	177	6	2-9	148	1	0-6
MERCY MEM HOSP URBANA OH 43078	3	33	3-84	9	22	9-64	23	9	4-33	5	0	0-100	60	8	3-17	36	0	1-21	5	20	0-80	49	12	1-16	28	0	0-33
MIAMI VALLEY HOSP DAYTON OH 45409	65	20	7-36	31	39	23-58	102	12	4-16	131	1	0-6	365	5	3-8	158	4	2-11	33	0	0-52	416	4	3-7	279	1	0-4
MIODLETOWN HOSP ASSN MIDOLETOWN OH 45042	29	21	8-45	29	48	22-59	95	8	3-16	10	0	0-100	242	6	3-10	116	3	2-13	27	0	0-86	160	4	2-9	166	1	0-6
MOLLY STARK HOSPITAL LOUISVILLE OH 44641	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
MORROW CO HOSP MOUNT GILEAO OH 43338	8	25	6-65	7	29	15-79	10	10	1-47	.	.		31	3	1-21	19	0	1-31	1	0	0-100	35	3	1-19	7	0	0-98
MT CARMEL HEALTH COLUMBUS OH 43222	38	13	7-40	97	42	27-51	155	10	4-15	32	0	0-63	537	8	4-9	308	6	2-11	63	0	0-30	830	7	3-6	410	1	0-4
MT SINAI MEDICAL CTR CLEVELANO OH 44106	19	21	6-49	24	42	18-58	64	5	3-18	80	0	0-12	258	4	3-10	155	5	3-13	22	0	0-39	263	8	3-9	200	1	0-5
NORTHEASTERN OHIO GENERAL MADISON OH 44057	1	0	0-100	1	0	2-98	12	0	2-43	.	.		53	0	1-15	23	4	1-28	3	0	0-100	34	0	1-19	22	0	0-37
O BLENESS MEMORIAL HOSPITA ATHENS OH 45701	4	50	6-82	9	44	12-69	24	4	1-28	2	0	0-100	64	3	2-15	49	2	1-17	6	0	0-100	43	0	1-17	26	0	0-30
OAK HILL COMM MEDICAL CTR OAK HILL OH 45656	2	0	2-90	.	.		4	0	0-83	.	.		29	0	1-22	7	0	0-64	3	0	0-100	20	5	0-28	12	0	0-65
OHIO STATE UNIVERSITY HOSP COLUMBUS OH 43210	76	5	5-34	19	53	21-65	28	11	2-26	203	0	0-4	196	7	4-11	145	3	1-11	18	0	0-100	400	6	3-8	113	2	0-7
OHIO VALLEY HOSPITAL STEUBENVILLE OH 43952	12	33	4-53	20	15	16-58	35	11	3-25	3	0	0-100	121	7	2-12	51	2	1-17	9	0	0-97	108	3	2-10	58	0	0-12
OTTO C EPP MEMORIAL HOSPIT CINCINNATI OH 45236	3	33	4-86	1	0	0-97	6	0	0-64	.	.		48	15	2-17	18	0	1-32	6	0	0-90	19	0	1-30	41	2	0-16
OUR LADY OF MERCY HOSP CINCINNATI OH 45227	18	22	8-51	13	31	16-66	76	4	5-20	8	0	0-98	249	7	3-10	123	8	3-14	20	0	0-49	170	4	2-9	151	1	0-6
PARKVIEW HOSPITAL TOLEDO OH 43624	9	22	8-65	4	50	8-83	17	12	2-35	2	0	0-100	91	5	2-13	29	0	1-25	5	0	0-100	67	3	1-12	54	0	0-13

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
PARMA COMMUNITY GENERAL HO PARMA OH 44129	OH-147	3245	13	10-16	232	23	18-34	122	30	20-38	60	20	8-30	263	26	17-29	176	47	31-47	62	13	6-28	237	27	15-28
PAULDING COUNTY HOSPITAL PAULDING OH 45879	OH-148*	283	10	9-18	12	33	8-57	5	0	4-72	2	0	0-91	18	22	9-48	9	33	17-74	7	14	1-59	44	14	10-35
PEOPLES HOSPITAL INC MANSFIELD OH 44905	OH-149*	332	11	5-14	26	19	9-42	11	9	9-58	4	25	2-75	15	40	7-48	3	33	9-90	12	17	3-48	21	14	5-38
PIKE CO HOSP WAVERLY OH 45690	OH-150	385	16	10-19	12	33	7-54	13	31	10-57	11	27	4-52	25	28	12-46	12	50	17-68	18	17	5-43	67	30	12-33
PIQUA MEM HOSP PIQUA OH 45356	OH-151	1054	13	10-17	43	33	14-42	40	40	18-47	22	14	6-40	102	26	15-32	47	38	28-57	19	16	8-47	117	20	11-27
POTTERS MEDICAL CTR EAST LIVERPOOL OH 43920	OH-152	94	4	5-19	2	50	3-91	2	0	1-89	.	.		6	17	6-70	2	50	3-91	3	0	1-81	10	0	5-54
PROVIDENCE HOSP CINCINNATI OH 45239	OH-153*	2710	11	8-15	235	25	15-31	57	39	18-43	73	21	8-29	173	19	16-30	98	41	28-49	53	11	9-34	187	20	13-27
PROVIDENCE HOSP SANDUSKY OH 44870	OH-154	1406	11	8-15	67	21	15-39	32	38	15-47	35	29	10-38	74	31	13-33	37	30	23-55	29	10	10-43	157	15	13-28
RICHMOND HEIGHTS GENERAL H RICHMOND HEIGHTS OH 44143	OH-155	1325	11	8-15	79	27	16-38	50	30	17-42	28	29	10-42	79	20	13-32	46	41	25-54	26	23	11-46	146	14	11-25
RIVERSIDE HOSPITAL TOLEDO OH 43604	OH-156	1394	12	8-15	67	28	15-39	45	40	18-45	24	17	7-40	83	22	15-33	51	51	26-53	57	30	12-38	111	11	9-24
RIVERSIDE METHODIST HOSPIT COLUMBUS OH 43214	OH-157	7090	10	9-15	533	19	19-32	209	24	21-35	136	18	14-32	293	22	18-29	285	30	29-43	105	21	13-33	453	22	16-27
ROBINSON MEMORIAL HOSPITAL RAVENNA OH 44266	OH-158	1375	13	9-16	70	24	14-37	54	28	16-40	50	16	11-35	87	20	15-33	55	42	26-53	40	20	8-35	128	18	11-27
SALEM COMMUNITY HOSPITAL SALEM OH 44460	OH-159*	1813	14	10-16	98	24	17-38	77	34	20-41	48	29	10-36	126	29	15-31	85	38	29-51	35	26	10-40	161	18	13-28
SAMARITAN HOSP ASHLAND OH 44805	OH-160	665	11	9-17	36	17	11-41	28	29	15-49	19	37	5-41	36	17	9-36	36	17	26-58	24	21	9-45	64	27	12-34
SCIOTO MEMORIAL HOSP PORTSMOUTH OH 45662	OH-161	1277	14	10-17	99	35	17-38	38	26	14-43	20	5	7-44	103	24	16-33	68	43	27-51	29	10	7-38	137	24	14-29
SELBY GEN HOSP MARIETTA OH 45750	OH-162*	246	19	9-20	8	38	5-60	11	45	10-61	6	17	1-63	15	27	7-49	8	63	14-74	6	33	3-65	32	41	11-41
SHELBY MEMORIAL HOSPITAL SHELBY OH 44875	OH-163	322	13	9-18	14	29	12-59	17	35	14-57	7	0	2-59	16	31	6-46	14	50	21-69	11	9	3-49	34	15	7-33
SOUTHERN HILLS HOSPITAL PORTSMOUTH OH 45662	OH-164	250	2	3-12	6	33	6-71	3	0	3-84	1	0	0-97	7	14	4-62	.	.		2	0	0-90	21	0	6-41
SOUTHWEST GENERAL HOSP MIDDLEBURG HTS OH 44130	OH-165	1892	13	10-16	147	31	20-39	60	23	18-42	22	18	5-39	172	28	16-30	78	45	26-48	32	22	6-36	180	20	13-27
ST ALEXIS HOSP CLEVELAND OH 44127	OH-166	1471	14	9-16	97	32	17-38	64	23	18-41	47	9	9-34	122	27	14-30	33	45	24-57	37	24	8-36	134	14	12-28
ST ANNS HOSPITAL OF COLUMB COLUMBUS OH 43205	OH-167	915	15	10-17	26	12	10-43	40	40	16-45	15	20	4-43	60	20	13-35	38	45	29-61	20	20	4-40	112	29	15-32
ST ANTHONY HOSPITAL COLUMBUS OH 43203	OH-168	2652	10	8-14	125	23	15-34	112	23	19-37	48	19	8-32	150	13	14-28	69	43	29-53	77	21	10-32	175	15	13-28
ST CHARLES HOSP OREGON OH 43616	OH-169	1982	12	9-15	136	22	14-31	67	27	20-43	41	22	8-35	123	30	16-32	74	36	26-49	34	24	9-39	147	16	13-28
ST ELIZABETH HOSPITAL YOUNGSTOWN OH 44501	OH-170*	5736	11	8-14	375	28	20-34	179	28	20-35	131	17	12-29	330	19	17-27	208	42	30-45	101	12	8-27	424	18	14-25
ST ELIZABETH MEDICAL CENTE DAYTON OH 45408	OH-171	3417	10	8-14	248	27	20-35	127	18	19-35	72	13	9-30	190	22	16-29	69	20	26-50	111	16	10-30	223	20	13-26
ST FRANCIS ST GEORGE HOSPI CINCINNATI OH 45214	OH-172	2253	14	10-17	156	24	13-30	96	23	21-40	66	18	12-34	170	24	16-29	81	33	28-51	57	25	12-37	197	30	16-30

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
PARMA COMMUNITY GENERAL HO PARMA OH 44129	21	29	9-51	25	8	16-54	70	10	6-23	5	0	0-100	333	4	3-9	202	5	1-10	38	0	0-56	288	3	2-8	243	2	1-5
PAULOING COUNTY HOSPITAL PAULOING OH 45879	4	25	6-81	9	22	11-68	4	0	0-86	.	.		42	2	2-19	16	0	0-43	2	0	0-100	22	5	1-26	6	0	0-98
PEOPLES HOSPITAL INC MANSFIELO OH 44905	5	20	1-72	1	0	0-98	.	.		.	.		54	7	1-14	18	6	0-34	8	0	0-100	28	4	1-22	13	0	0-54
PIKE CO HOSP WAVERLY OH 45690	3	67	4-85	3	33	5-86	15	13	2-38	.	.		31	3	1-21	8	0	0-58	.	.		36	6	1-20	13	0	0-62
PIOUA MEM HOSP PIQUA OH 45356	10	20	8-63	6	17	9-75	23	13	3-31	3	0	0-100	97	1	2-12	62	6	2-16	14	0	0-95	108	2	2-10	34	0	0-18
POTTERS MEOICAL CTR EAST LIVERPOOL OH 43920	3	33	9-91	.	.		.	.		.	.		7	0	0-58	6	0	0-78	.	.		5	0	0-83	27	0	0-41
PROVIOENCE HOSP CINCINNATI OH 45239	8	25	9-69	19	37	21-65	62	26	4-21	29	3	0-53	296	6	2-8	121	2	1-12	26	4	0-49	226	4	2-8	168	1	0-6
PROVIOENCE HOSP SANOUSKY OH 44870	14	7	4-51	12	33	10-60	29	3	2-26	3	0	0-100	133	3	2-11	68	10	1-15	6	0	0-84	111	8	2-11	112	1	1-8
RICHMONO HEIGHTS GENERAL H RICHMONO HEIGHTS OH 44143	13	23	4-52	7	57	14-77	24	21	3-32	4	0	0-100	124	2	2-10	70	3	1-15	16	0	0-75	136	4	2-9	103	1	0-8
RIVERSIOE HOSPITAL TOLEOO OH 43604	11	18	2-53	15	20	18-66	26	12	2-27	.	.		148	7	3-11	59	3	1-16	10	0	0-88	102	3	2-11	80	1	0-10
RIVERSIOE METHOOIST HOSPIT COLUMBUS OH 43214	65	26	13-44	44	43	24-55	185	6	6-17	62	0	0-14	671	6	4-9	297	4	2-11	45	0	0-37	889	3	3-7	531	1	1-4
ROBINSON MEMORIAL HOSPITAL RAVENNA OH 44266	11	27	11-66	9	44	12-69	37	11	3-25	9	0	0-100	144	6	3-11	61	3	2-18	8	0	0-100	163	3	2-9	61	2	0-12
SALEM COMMUNITY HOSPITAL SALEM OH 44460	11	45	9-62	15	67	18-66	48	8	3-21	9	0	0-100	220	5	3-10	84	4	2-14	15	0	0-97	187	4	2-9	77	1	0-9
SAMARITAN HOSP ASHLANO OH 44805	1	100	0-99	7	43	9-72	17	6	2-36	1	0	0-100	74	1	1-13	37	3	1-20	7	0	0-100	78	4	1-12	44	5	0-15
SCIOTO MEMORIAL HOSP PORTSMOUTH OH 45662	8	25	6-65	16	25	17-63	28	11	3-29	1	0	0-100	157	7	2-11	62	3	2-17	12	0	0-85	110	2	2-11	64	3	0-11
SELBY GEN HOSP MARIETTA OH 45750	9	33	6-63	3	0	3-84	9	33	4-55	1	0	0-100	28	0	1-22	8	13	1-54	3	0	0-100	25	4	1-24	6	0	0-98
SHELBY MEMORIAL HOSPITAL SHELBY OH 44875	3	67	6-88	1	0	0-98	17	6	2-36		.		54	11	3-18	6	0	0-69	1	0	0-100	22	9	1-27	28	0	0-28
SOUTHERN HILLS HOSPITAL PORTSMOUTH OH 45662	2	0	0-91	.	.		.	.		.	.		11	0	0-49	4	0	0-81	.	.		6	0	0-70	17	0	0-59
SOUTHWEST GENERAL HOSP MIOOLEBURG HTS OH 44130	15	40	10-58	9	22	13-70	40	5	3-24	6	0	0-100	177	2	2-10	67	4	1-15	7	0	0-99	145	5	2-10	113	3	0-7
ST ALEXIS HOSP CLEVELANO OH 44127	10	20	5-59	12	25	14-66	30	0	2-25	30	3	0-72	150	12	3-12	65	8	1-15	8	0	0-100	143	3	2-10	63	0	0-11
ST ANNS HOSPITAL OF COLUMB COLUMBUS OH 43205	7	43	6-69	13	46	17-67	52	8	4-23	.	.		94	13	3-14	36	8	1-21	4	0	0-100	63	10	2-14	66	2	0-11
ST ANTHONY HOSPITAL COLUMBUS OH 43203	22	32	6-45	37	38	22-55	55	4	4-21	20	0	0-87	186	4	2-10	85	8	2-14	8	0	0-97	119	10	2-11	381	1	0-4
ST CHARLES HOSP OREGON OH 43616	21	19	9-51	21	14	22-64	59	10	5-22	6	0	0-100	182	7	3-11	99	7	2-14	9	0	0-100	196	5	2-9	117	1	0-7
ST ELIZABETH HOSPITAL YOUNGSTOWN OH 44501	46	20	11-44	58	45	23-51	111	9	4-16	23	0	0-76	476	5	3-8	198	4	2-11	54	0	0-41	877	3	3-6	296	1	0-4
ST ELIZABETH MEOICAL CENTE OAYTON OH 45408	37	19	13-48	28	39	19-55	58	9	3-20	58	0	0-26	267	5	2-8	142	7	2-12	38	0	0-41	373	5	2-7	199	2	0-5
ST FRANCIS ST GEORGE HOSPI CINCINNATI OH 45214	16	44	13-61	30	23	21-57	75	13	5-20	14	0	0-87	224	5	3-11	112	7	3-14	10	0	0-100	169	7	2-9	135	1	0-7

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
HOSPITALS Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST JOHN HOSPITAL CLEVELANO OH 44102	DH·173*	1341	13	10-17	83	25	18-40	56	29	18-42	33	18	7-35	94	19	14-32	32	53	26-60	29	24	7-39	151	12	13-29
ST JOHN S MEOICAL CENTER STEUBENVILLE OH 43952	OH-174	1651	13	9-15	88	23	18-40	47	19	17-43	25	20	4-35	116	32	15-31	60	50	26-52	57	25	11-36	148	23	14-29
ST JOHN WEST SHORE HOSPITA WEST LAKE OH 44145	OH-175	1478	13	8-15	75	27	17-40	57	26	17-41	28	11	5-35	81	33	16-35	42	50	24-54	30	10	7-38	153	21	13-28
ST JOSEPH HOSPITAL & HEALT LORAIN OH 44052	OH-176	1462	14	11-18	121	37	23-43	61	34	20-44	22	27	8-44	101	18	16-33	34	47	23-56	42	17	15-44	132	27	13-29
ST JOSEPH RIVERSIOE HOSP WARREN DH 44485	OH-177	1383	11	9-16	83	20	15-36	47	21	18-45	16	19	5-44	119	23	15-31	37	54	24-56	63	21	11-35	102	25	14-31
ST LUKES HOSP MAUMEE OH 43537	OH-178	2310	11	10-16	151	23	16-34	106	25	19-38	45	16	9-34	154	19	18-32	138	32	30-48	40	10	8-36	179	15	14-28
ST LUKES-HOSP CLEVELANO OH 44104	OH-179	2081	11	8-15	175	25	18-35	57	30	17-40	30	20	6-35	117	15	15-31	73	36	28-52	45	22	9-36	130	24	12-28
ST RITAS MEOICAL CTR LIMA OH 45801	OH-180	2208	11	9-16	151	29	17-35	71	28	17-39	43	16	12-39	134	22	16-32	68	29	26-51	61	30	19-45	162	22	14-29
ST THOMAS HDSPITAL MEOICAL AKRDN DH 44310	OH-181	2115	13	9-15	101	25	14-33	67	31	18-40	59	20	11-34	110	28	15-32	53	43	28-55	69	20	8-31	201	19	14-28
ST VINCENT CHARITY HOSPITA CLEVELAND OH 44115	OH-182	2539	10	7-13	129	33	22-41	55	27	17-41	34	12	7-35	134	24	16-31	63	40	26-51	53	19	8-33	128	20	13-29
ST VINCENTS HDSP MEDICAL TDLEDO OH 43608	OH-183	3265	9	7-14	226	20	16-32	94	23	17-36	47	13	11-36	151	20	16-30	101	42	24-44	43	14	7-34	151	17	14-29
STOUDER MEMORIAL HOSPITAL TROY OH 45373	OH-184	1035	13	10-17	89	28	19-41	35	26	16-47	19	21	6-42	82	29	15-35	39	46	26-57	20	25	9-47	68	29	10-30
SUBURBAN CDMM HOSP CLEVELAND OH 44122	OH-185*	1430	17	12-19	78	33	14-36	58	29	18-42	37	14	10-39	137	21	16-32	72	39	26-50	48	23	8-33	172	22	17-32
SYCAMORE MED CTR MIAMISBURG DH 45342	OH-186	927	10	9-16	53	17	13-38	28	18	16-49	28	11	6-36	61	28	13-35	34	35	23-55	30	20	9-40	70	21	13-34
TIMKEN MERCY MEDICAL CTR CANTDN OH 44708	OH-187*	3369	11	8-15	237	26	18-34	78	31	21-42	63	16	10-32	178	23	16-30	105	44	29-49	55	16	12-37	264	19	15-27
TOLEDO HOSPITAL TOLEDO OH 43606	OH-188	4878	10	8-14	379	24	17-31	175	26	22-37	89	19	9-28	206	25	17-30	146	39	31-49	75	13	8-30	291	20	14-27
TRUMBULL MEMDRIAL HDSPITAL WARREN OH 44482	OH-189	2714	10	9-15	174	19	16-33	96	27	20-39	70	23	10-31	145	23	16-31	109	30	30-50	67	24	15-40	277	17	14-27
TWIN CITY HDSPITAL DENNISON OH 44621	DH-190	405	19	11-20	15	33	9-53	14	36	10-55	10	40	4-53	40	43	13-40	38	50	26-57	7	14	4-64	48	23	9-32
UNION HOSPITAL DOVER OH 44622	OH-191	1341	14	9-16	95	38	16-36	47	23	18-45	27	30	7-38	93	25	16-34	48	50	23-51	32	13	8-38	135	28	15-32
UNIV OF CINCINNATI MED CTR CINCINNATI OH 45267	OH-192	2986	9	7-13	244	23	21-37	82	16	16-36	48	17	7-31	92	12	13-30	59	47	27-53	72	13	8-29	199	17	12-26
UNIVERSITY HDSPITALS DF CL CLEVELAND OH 44106	OH-193	3247	11	8-15	326	24	18-32	83	33	17-38	54	13	8-31	136	15	15-31	87	31	29-51	49	22	12-38	239	16	14-27
US AIR FORCE HOSP DAYTDN OH 45433	OH-194*	2	50	0-97	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VA HDSP DAYTDN DH 45428	OH-195*	2	0	0-99	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VAN WERT CDUNTY HOSP!TAL VAN WERT DH 45891	DH-196	684	13	9-17	35	14	9-37	21	43	13-51	27	11	6-36	41	20	12-39	35	54	25-57	10	30	5-57	82	24	14-34
VETERANS MEM HDSP POMERDY DH 45769	DH-197	344	16	10-20	21	33	17-57	13	31	12-60	11	18	3-49	23	39	11-45	22	41	22-61	17	6	2-40	36	28	9-35
WADSWORTH RITTMAN HDSPITAL WADSWORTH DH 44281	DH-198*	633	13	8-15	42	26	12-39	21	33	13-51	15	7	5-45	37	41	12-39	22	50	19-59	24	13	8-43	43	26	8-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ST JOHN HOSPITAL CLEVELANO OH 44102	13	38	7-57	18	44	16-59	33	18	5-29	4	0	0-100	131	6	2-12	42	5	1-19	7	0	0·100	108	3	2-11	53	0	0-13
ST JOHN S MEOICAL CENTER STEUBENVILLE OH 43952	8	38	2-60	21	43	17-58	25	12	2-27	14	7	0-97	159	8	3-11	75	1	1-14	11	0	0-100	174	3	2-8	47	2	0-16
ST JOHN WEST SHORE HOSPITA WEST LAKE OH 44145	13	23	6-55	14	43	17-66	40	15	4-25	3	0	0-100	168	5	2-10	58	5	3-19	9	0	0-92	136	6	2-11	122	4	0-7
ST JOSEPH HOSPITAL & HEALT LORAIN OH 44052	15	33	11-59	15	40	15-62	34	15	4-27	1	0	0-100	99	5	3-13	74	3	2-15	9	0	0-100	75	4	2-13	87	0	0-9
ST JOSEPH RIVERSIOE HOSP WARREN OH 44485	10	30	4-58	8	38	13-74	28	7	4-30	4	0	0-100	124	6	2-11	42	7	2-20	6	0	0-99	111	3	2-11	89	4	0-9
ST LUKES HOSP MAUMEE OH 43537	20	25	8-50	13	23	14-63	69	6	4-19	16	0	0-87	262	5	2-9	101	10	2-14	13	0	0-92	164	4	2-9	178	3	0-6
ST LUKES-HOSP CLEVELANO OH 44104	14	43	11-61	25	36	20-59	31	6	4-29	123	0	0-8	148	5	3-12	100	4	1-13	2	0	0-100	224	6	2-8	191	0	0-5
ST RITAS MEOICAL CTR LIMA OH 45801	22	9	6-46	25	36	23-62	58	9	3-19	7	0	0-100	160	3	2-10	74	9	2-15	27	4	0-27	206	4	3-9	152	3	0-6
ST THOMAS HOSPITAL MEOICAL AKRON OH 44310	22	23	9-50	44	32	22-53	42	12	3-23	16	0	0-99	188	5	2-10	100	17	4-17	20	0	0-84	199	3	2-9	108	4	0-7
ST VINCENT CHARITY HOSPITA CLEVELANO OH 44115	19	26	8-51	15	27	19-66	37	11	3-24	10	0	0-99	164	5	3-11	50	6	2-19	8	0	0-94	454	7	3-7	346	2	0-4
ST VINCENTS HOSP MEOICAL TOLEOO OH 43608	36	22	14-49	19	53	22-66	63	11	3-19	103	1	0-7	241	6	4-11	174	5	2-12	12	0	0-87	416	3	3-8	290	1	1-5
STOUOER MEMORIAL HOSPITAL TROY OH 45373	3	0	2-83	11	36	14-68	30	10	3-28	9	0	0-97	120	5	3-12	32	3	2-24	5	0	0-100	76	3	2-13	62	0	0-11
SUBURBAN COMM HOSP CLEVELANO OH 44122	14	36	9-57	45	51	24-55	37	16	3-24	8	0	0-99	105	5	2-12	68	6	2-16	2	0	0-100	94	3	2-11	55	2	0-12
SYCAMORE MEO CTR MIAMISBURG OH 45342	6	0	1-66	14	36	16-64	28	4	3-28	5	0	0-100	118	4	2-11	56	5	1-16	7	0	0-99	85	5	2-12	58	0	0-12
TIMKEN MERCY MEOICAL CTR CANTON OH 44708	22	18	10-51	17	24	21-66	80	10	5-21	88	0	0-11	278	6	3-9	110	7	3-14	33	0	0-61	287	3	3-8	251	0	1-5
TOLEOO HOSPITAL TOLEOO OH 43606	38	29	12-47	49	49	24-54	109	9	4-16	35	0	0-42	486	4	3-9	203	3	2-11	41	0	0-59	519	4	3-7	422	1	1-4
TRUMBULL MEMORIAL HOSPITAL WARREN OH 44482	10	10	4-58	14	14	20-69	70	6	3-18	4	25	0-100	243	6	3-9	90	1	1-13	15	0	0-98	275	3	2-8	189	1	0-5
TWIN CITY HOSPITAL OENNISON OH 44621	3	33	6-88	3	0	3-83	7	0	1-57	.	.		52	4	2-17	9	0	0-67	3	0	0-100	46	4	1-17	9	11	0-89
UNION HOSPITAL DOVER OH 44622	9	11	4-60	14	14	11-58	45	11	3-23	4	0	0-100	168	3	2-10	52	2	1-17	15	0	0-81	119	5	2-10	66	3	0-11
UNIV OF CINCINNATI MEO CTR CINCINNATI OH 45267	32	9	3-38	16	56	22-69	49	18	3-22	123	0	0-8	209	8	3-11	169	6	2-11	16	0	0-99	231	4	3-9	138	1	0-6
UNIVERSITY HOSPITALS OF CL CLEVELANO OH 44106	29	21	9-47	6	100	9-76	58	5	4-21	107	0	0-9	236	11	4-12	144	11	3-13	28	0	0-25	316	11	3-9	278	2	0-4
US AIR FORCE HOSP OAYTON OH 45433	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VA HOSP OAYTON OH 45428	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VAN WERT COUNTY HOSPITAL VAN WERT OH 45891	2	0	2-90	5	40	12-83	30	13	2-26	.	.		94	6	2-12	34	6	1-22	6	0	0-100	49	4	2-18	44	0	0-17
VETERANS MEM HOSP POMEROY OH 45769	4	25	3-77	2	100	2-90	13	0	1-41	.	.		37	0	1-19	25	12	1-26	3	0	0-100	18	6	0-31	13	0	0-72
WAOSWORTH RITTMAN HOSPITAL WAOSWORTH OH 44281	3	0	2-83	5	40	5-74	25	12	3-31	2	0	0-100	79	5	1-12	41	2	1-19	4	0	0-100	52	2	1-16	60	2	0-12

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Medicare Hospital Mortality Information

HOSPITALS					High Risk Diagnostic Categories																				
		Overall			Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
WARREN GEN HOSP WARREN OH 44481	OH-199	1136	13	9-16	54	24	14-39	24	21	14-50	13	31	6-51	81	35	16-35	47	43	24-52	29	7	7-39	112	21	13-30
WAYNE GENERAL HOSPITAL ORRVILLE OH 44667	OH-200*	16	0	0-47	.	.			.		.	.		.	.		.			.	.		.	.	
WAYNE HOSPITAL COMPANY GREENVILLE OH 45331	OH-201*	913	13	9-17	70	20	13-35	40	43	17-46	20	20	7-43	42	26	12-38	32	50	25-59	15	27	13-59	90	17	12-31
WELLINGTON COMMUNITY HOSPI WELLINGTON OH 44090	OH-202*	164	5	6-17	4	50	3-77	1	100	1-97	3	0	1-81	8	13	5-61	6	17	8-74	12	0	2-47	21	0	7-41
WILLARD AREA HOSPITAL WILLARD OH 44890	OH-203	329	12	8-17	13	23	7-52	18	28	12-53	14	14	3-44	18	33	9-48	10	30	14-69	10	30	6-57	29	28	11-43
WILLIAMS CO HOSP MONTPELIER OH 43543	OH-204*	89	9	5-20	5	40	4-72	3	0	4-85	2	0	2-89	3	0	1-81				1	100	1-97	12	25	5-50
WILSON MEM HOSP SIONEY OH 45365	OH-205	793	16	9-17	55	36	15-40	26	23	14-48	27	19	5-35	67	31	13-34	28	39	23-58	28	29	10-43	68	22	12-32
WOOD CO HOSP BOWLING GREEN OH 43402	OH-206	767	9	8-16	44	16	14-41	25	40	15-51	17	12	6-45	36	22	12-40	26	27	23-60	11	9	5-53	64	17	12-34
WOOSTER COMMUNITY HOSPITAL WOOSTER OH 44691	OH-207	1062	13	9-17	61	25	15-39	49	24	16-41	28	14	7-37	65	26	14-35	61	41	26-51	21	14	13-52	87	24	12-30
WYANDOT MEM HOSP UPPER SANOUSKY OH 43351	OH-208	383	16	11-20	20	5	8-45	11	64	13-65	11	27	3-49	29	24	12-43	21	33	21-61	16	25	7-48	55	29	15-39
YOUNGSTOWN HOSPITAL ASSN YOUNGSTOWN OH 44501	OH-209	4898	11	9-15	449	27	18-32	140	26	19-36	88	18	10-29	224	22	17-29	228	31	30-46	95	19	9-29	394	13	14-25
YOUNGSTOWN OSTEOPATHIC HOS YOUNGSTOWN OH 44505	OH-210*	819	11	9-16	37	27	17-48	31	26	14-45	38	13	9-36	55	20	13-36	12	25	19-71	30	7	5-35	77	19	13-33

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
WARREN GEN HOSP WARREN OH 44481	8	13	5-64	14	64	15-63	35	11	3-26	.	.		154	4	2-10	60	15	2-17	7	0	0-100	108	7	2-10	64	2	0-11
WAYNE GENERAL HOSPITAL ORRVILLE OH 44667	.	.		.	.		.	.		.	.		1	0	0-97	.	.		.	.		1	0	0-99	13	0	0-88
WAYNE HOSPITAL COMPANY GREENVILLE OH 45331	8	25	5-64	14	57	19-68	36	8	2-23	11	0	0-100	97	3	2-13	44	2	2-20	14	0	0-99	53	4	1-14	71	1	0-10
WELLINGTON COMMUNITY HOSPI WELLINGTON OH 44090	1	0	0-97	1	0	0-97	8	0	0-56	.	.		14	0	0-41	3	0	0-99	3	0	0-100	28	7	1-22	13	0	0-73
WILLARO AREA HOSPITAL WILLARO OH 44890	5	20	1-71	2	100	2-91	12	8	1-42	.	.		27	4	1-24	9	11	0-51	6	0	0-100	40	3	1-17	15	7	0-36
WILLIAMS CO HOSP MONTPELIER OH 43543	1	100	1-97	.	.		1	0	0-99	.	.		14	0	0-38	2	0	0-93	.	.		11	0	0-45	3	0	0-98
WILSON MEM HOSP SIONEY OH 45365	8	13	6-65	7	0	8-69	18	28	4-38	4	0	0-100	93	5	3-14	44	5	1-18	10	0	0-99	64	2	1-13	31	3	0-29
WOOO CO HOSP BOWLING GREEN OH 43402	8	13	7-66	6	33	11-77	17	0	2-35	8	0	0-97	101	5	2-12	34	0	2-24	8	0	0-98	66	5	2-14	39	0	0-17
WOOSTER COMMUNITY HOSPITAL WOOSTER OH 44691	6	50	2-67	8	13	9-68	43	9	4-25	20	0	0-85	121	7	3-12	41	2	1-20	15	0	0-97	67	4	2-14	68	1	0-10
WYANOOT MEM HOSP UPPER SANOUSKY OH 43351	2	0	1-90	7	57	10-72	9	0	2-51	.	.		47	11	2-18	26	8	1-25	3	0	0-100	32	13	1-20	13	0	0-67
YOUNGSTOWN HOSPITAL ASSN YOUNGSTOWN OH 44501	45	13	6-39	58	24	24-52	103	10	4-17	28	0	0-28	441	5	3-8	294	4	1-9	39	0	0-41	468	4	2-7	331	1	0-4
YOUNGSTOWN OSTEOPATHIC HOS YOUNGSTOWN OH 44505	10	40	9-65	21	24	14-54	18	6	1-33	1	0	0-100	66	11	1-12	38	5	2-21	6	0	0-100	78	5	2-13	64	0	0-12

*Written Comments Not Submitted.

AKRON GENERAL
MEDICAL CENTER

400 Wabash Avenue
Akron, Ohio 44307
216/384-6000

Michael A. West
President and CEO

October 26, 1987

William L. Roper, M.D.
Administrator
Healthcare Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

In response to your letter of September 21, 1987, we would like to offer the comment that an assessment of hospital performance is dependent upon many variables. This requires a look at many quality indicators of which mortality is only one. We sincerely believe that the process by which high quality patient care is provided is very complex and that judgements of quality must be based on a variety of indicators, a number of which require the assistance of professional experience and knowledge.

We appreciate the opportunity to have reviewed our data.

Sincerely

Michael A. West

Michael A. West
President

David A. Schumann

David A. Schumann, M.D.
Chairman
Quality Assurance Committee

ja

Member of:
Health Network of Ohio
VHA.
Voluntary Hospitals of America, Inc.

BARBERTON CITIZENS HOSPITAL

October 26, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Providing quality health care is the utmost concern to this hospital's board of trustees, medical staff and management team. Therefore, we appreciate the opportunity to comment to the Health Care Financing Administration (HCFA) about our quality assurance activities and confirm that the release of this information will be used as a tool in our continual monitoring of quality care. However, mortality data such as this is not a true measure of quality care. Although we are strong proponents of the public's right to obtain useful, reliable information on the quality of health care available to them, we also advocate understanding the proper way to interpret this information. Despite the apparent significance of the information we fear that consumers will draw inaccurate conclusions from the data.

The mortality data does not necessarily identify areas in which this or any other hospital provides "high quality" or "low quality" care. A high mortality rate higher than predicted does not confirm the existence of quality problems, just as a mortality rate lower than predicted does not necessarily establish a "high quality" care performance. Actual mortality rates can be higher or lower for a variety of reasons. Most glaringly, HCFA mortality rates do not adequately account for the severity of a patient's illness which is a prerequisite to meaningful death statistics.

We feel that comparisons of actual and predicted mortality rates should be viewed as only a "crude" measure of quality. The data can merely suggest that the hospital and its medical staff review an area to determine if a quality problem exists or if the type of patients treated by the hospital have unique characteristics that would contribute toward the institution's mortality rates.

Using the expertise of our quality assurance committee and peer review organizations in joint cooperation of our medical staff, patient records are routinely researched, diagnoses and treatments studied, and a comprehensive summary and call to action, if needed, is recommended. Should any indication of potential quality problems arise, we begin a prompt and thorough review.

None of our hospital's actual mortality rates fell outside of the range of the predicted mortality rates. However, after investigation and review by our

Tuscora Park • Barberton, Ohio 44203 • (216) 745-1611

quality assurance group and medical staff, we have discovered coding discrepancies in three diagnostic categories contained in the HCFA data. After correction of the data our actual mortality rates percentages dropped even further in these three diagnostic areas.

The mission of the hospital has and will continue to be to strive for excellence in patient care and to provide the highest quality of medical care to the community. We will continue to aggressively educate our employees, medical staff, Board of Trustees and the citizens of our community on the significance of this HCFA data.

Sincerely,

M. A. Bernatovicz
President
Barberton Citizens Hospital
Medicare Provider Number 36-0019

MAB:ew

THE BELLEVUE HOSPITAL

SERVING THE AREA SINCE 1916 -

811 NORTHWEST STREET
BOX 309
BELLEVUE, OHIO 44811
419/483-4040

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Calendar Year 1986 Medicare Mortality Data

Presented below is a comparative analysis presenting calendar year (CY) 1986 Medicare mortality data which the Health Care Financing Administration (HCFA) prepared regarding The Bellevue Hospital (TBH) versus data contained in the Hospital's records. Please note that the death data reflects only those Medicare patients who died while still an inpatient at TBH. There is no reasonable way for TBH to verify the number of patients dying within 30 days of discharge.

	TBH	HCFA	VARIANCE
CY 86 Medicare beneficiaries	494	350	144
CY 86 Medicare inpatient deaths	26	19	7
CY 86 Medicare inpatient death rate	5.26%	5.43%	

It should be noted that TBH's count of CY 1986 Medicare beneficiaries has been adjusted to eliminate duplicate admissions as well as beneficiaries who were transferred to another acute care hospital following discharge from TBH. Presumably, a portion of the remaining discrepancy between TBH's count of beneficiaries and HCFA's count of beneficiaries reflects patients who have CY 1986 admissions to other acute care hospitals following their CY 1986 discharge from TBH. Once again, the Hospital is without a reasonable course of action in an attempt to determine the quantity of patients who fit into that category.

The variance data presented above results in a Medicare inpatient death rate for those beneficiary records of 4.86%. While that death rate is in reasonable proximity with the rate which HCFA's data attributes to TBH, it should be noted that up to 10% of the Medicare beneficiaries reported in the variance column could be eliminated due to subsequent admission to another acute care hospital without increasing the inpatient death rate on the variance column above the 5.43% inpatient death rate determined by HCFA.

Without detailed information concerning the billing data available to HCFA in assigning patients, computing the actual mortality rate or predicting a mortality range for each diagnostic category, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis. Accordingly, TBH has made no attempt to do so.

Respectfully submitted,

Philip A. Meyer
Executive Vice President

BERGER HOSPITAL

NORTH PICKAWAY STREET/CIRCLEVILLE, OHIO 43113/Phone 474-2126 Area 614

October 27,1987

William L.Roper,M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O.Box 26684
Baltimore,Maryland 21207

RE: Berger Hospital 360170
Medicare Mortality Information,1986

Dear Dr.Roper:

With reference to the above information provided our hospital by H.C.F.A. I wish to include the following comments:

1. The data provided is in error, our records indicate there were 506 Medicare patients admitted to Berger Hospital in 1986, not 420. Assuming all other provided information is correct,Berger Hospital Mortality Rate, all causes, is 14%. We did not review the diagnostic categories to calculate the mortality rate by the listed categories. However, if the total cases are in error,all data is in error.

2. Based on data provided, the average age of death for Berger Hospital patients is 81 years and 10 months. Of those who expired 16 were 90 years of age or greater, 37.5% were 85 years of age or older and;

3. I have a fear that many Medicare patients, because of P.R.O. criteria for admission, do not enter the hospital until their condition is such that they may not recover as quickly, if at all.

Thank you for this opportunity to comment and to some degree correct what I believe to be,to some extent,erroneous data.

Sincerely,

Charles D.Rideout
Administrator

A NON-PROFIT CITY/COUNTY HOSPITAL

Bethesda

Glen E. McPheron MD
Vice President
Medical Affairs

October 26, 1987

Health Care Financing Adminstration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir or Madam:

Thank you for the opportunity to comment on the 1986 HCFA Medicare mortality statistics for Bethesda Hospitals. Please find enclosed our comments to be released with the mortality data. Also enclosed is a list of corrected data where our records differed from the information being released by HCFA.

If you have any questions, please contact me directly.

Sincerely,

Glen E. McPheron, MD

Glen E. McPheron, M.D.

GEM:lc
encl.

cc: L. T. Wilburn, Jr.

Bethesda Hospital, Inc. 619 Oak Street Cincinnati, Ohio 45206 513-569-6151

Exhibit II

BETHESDA HOSPITAL, INC.
Cincinnati, Ohio

Correction of HCFA Mortality Data

Pt ID Number	Surname First 6 Ltrs	Diagnostic Category	Age	Sex	HCFA Date of Admission	HCFA Date of Discharge	HCFA Date of Death	Actual Date of Admission	Actual Date of Discharge	Actual Date of Death	Principal Diagnosis	Principal Procedure
		CA	71	F	9-04-86	9-09-86	9-11-86	9-04-86	9-09-86	9-09-86	1628	
		CA	73	F	12-08-86	12-25-86	12-31-86	12-08-86	12-25-86	12-25-86	1504	
		CA	80	F	8-14-86	8-18-86	8-20-86	8-14-86	8-18-86	8-18-86	1628	
		CA	93	F	9-12-86	9-21-86	9-22-86	9-12-86	9-21-86	9-21-86	1538	
		CA	74	M	7-08-86	7-13-86	7-31-86	7-08-86	7-13-86	7-13-86	1628	
		CA	69	F	12-19-86	12-24-86	12-31-86	12-19-86	12-24-86	12-24-86	1890	
		CA	61	F	11-28-86	11-28-86	11-30-86	11-28-86	11-28-86	11-28-86	1490	
		CA	94	F	7-23-86	7-25-86	7-24-86	7-23-86	7-24-86	7-25-86	1538	4579
		CA	78	M	11-10-86	11-14-86	11-15-86	11-10-86	11-14-86	11-14-86	1541	5502
		CA	71	F	7-14-86	7-24-86	8-05-86	7-14-86	7-24-86			Pt had two
								8-03-86	8-05-86	8-05-86	1531	admissions
		GU	81	M	9-02-86	9-29-86	9-30-86	9-02-86	9-29-86	9-29-86	5590	5732
		GU	89	F	8-20-86	8-25-86	8-31-86	8-20-86	8-25-86	8-25-86	5590	
		HM	69	M	12-07-86	12-17-86	12-29-86	12-07-86	12-17-86	12-17-86	4254	
		HM	98	F	12-20-86	12-20-86	12-21-86	12-20-86	12-20-86	12-20-86	4280	
		HM	77	F	10-08-86	10-28-86	10-31-86	10-08-86	10-28-86	10-28-86	4280	
		HM	82	M	12-03-86	12-10-86	12-12-86	12-03-86	12-10-86	12-10-86	4254	
		HS	77	F	2-08-86	2-12-86	2-18-86	2-08-96	2-12-86	2-12-86	4101	
		HS	83	M	4-05-86	4-10-86	4-11-86	4-05-86	4-10-86	4-10-86	4104	3772
		HS	82	M	8-24-86	8-25-86	8-31-86	8-24-86	8-25-86	8-25-86	4410	586
		CA	80	F	9-05-86	9-23-86	9-30-86	9-05-86	9-23-86	9-23-86	1985	
		CA	62	M	1-19-86	1-19-86	1-21-86	1-19-86	1-19-86	1-19-86	1539	
		CA	70	M	10-31-86	11-27-86	11-30-86	10-31-86	11-27-86	11-27-86	1628	
		TR	71	M	10-19-86	10-22-86	10-31-86	10-19-86	10-22-86	10-22-86	85225	
		UN	83	F	5-15-86	5-24-86	5-31-86	5-15-86	5-24-86	5-24-86	7890	4513
		UN	44	M	11-17-86	11-18-86	11-28-86	11-17-86	11-18-86	11-18-86	5770	8962
		UN	69	M	9-10-86	9-21-86	9-30-86	9-10-86	9-21-86	9-21-86	2654	
		UN	73	F	11-15-86	11-22-86	11-23-86	11-15-86	11-22-86	11-22-86	2888	
		UN	61	M	5-08-86	5-12-86	5-31-86	5-08-86	5-12-86	5-12-86	5920	
		PN	92	F	3-23-86	3-25-86	3-24-86	3-23-86	3-25-86	3-25-86	485	
		PN	98	M	12-21-86	12-25-86	12-31-86	12-21-86	12-25-86	12-25-86	481	
		PN	99	F	10-13-86	10-15-86	10-31-86	10-13-86	10-15-86	10-15-86	486	
		HS	53	M	11-05-86	11-06-86	11-05-86	11-05-86	11-06-86	11-06-86	4104	
		ME	78	F	9-26-86	10-14-86	10-13-86	9-26-86	10-14-86	10-14-86	769	
UNVERIFIED PATIENTS												
		CA	43	F	6-14-86	6-20-86	6-20-86	Medicaid			1984	
		CA	75	M	2-24-86	2-25-86	2-25-86	Could not verify as a patient of Bethesda			1969	
		HS	71	M	4-24-86	5-05-86	5-05-86	Verified as an OB non-Medicare patient			42741	3893
		SE	81	F	2-21-86	2-28-86	3-03-86	Verified as an OB non-Medicare patient			389	

OH 30.1

Bethesda

COMMENTS ON THE HCFA MORTALITY DATA

Bethesda Hospital, Inc.
Cincinnati, Ohio
Provider Number 360179

Bethesda has analyzed the Medicare mortality data published by HCFA. Overall and in all categories except cancer, Bethesda was within the HCFA range of predicted mortality rates. Bethesda fell outside the predicted range for cancer mortality because deaths associated with The Hospice of Cincinnati were included in HCFA's calculations.

The Hospice of Cincinnati, owned and operated by Bethesda Hospital, is a community wide resource providing care and support to patients who have terminal illnesses and their families. Patients come from all over the Greater Cincinnati area, including other hospitals, to receive the care and support offered by The Hospice of Cincinnati. Bethesda verified that 192 of the 286 deaths in the diagnostic category of cancer were patients associated with The Hospice of Cincinnati, thus explaining why Bethesda was above the range of predicted mortality rates.

It is important to mention that mortality rates, by themselves, are a poor indicator of quality care. A patient's probability of dying is directly related to how sick the patient is. To the extent that one hospital treats sicker patients because of its location, reputation, services offered, and other factors, that hospital will have a higher mortality rate than other hospitals. Analysis of mortality data without considering each of the factors leading to each patient's death is misleading and inappropriate.

Bethesda appreciates the opportunity to comment upon these published mortality figures. We wish to impress upon anyone reviewing this information that we consider quality of care one of our highest priorities and as such we spend a great deal of time monitoring and improving the quality of care provided at Bethesda. It is our intent to continue to try to provide high quality of care to every person treated at Bethesda.

Bethesda Hospital, Inc. 619 Oak Street Cincinnati, Ohio 45206

Exhibit I

BETHESDA HOSPITAL INC.
Cincinnati, Ohio

Analysis of 1986 HCFA Medicare Mortali
Provider # 360179

Diagnostic Category		A Number of Cases	B HCFA Identified Deaths	C Verified Hospital Deaths Exc. Hospice	D Verif Hospice
Cancer	CA	589	286	78	19
Cerebrovascular Accident	CE	188	40	33	
Ophthalmologic Disease	EY	143	2	2	
GI Castrophies	GC	85	17	16	
GI Disease	GI	499	24	17	
Urologic Disease	GU	250	13	8	
Low Risk Heart Disease	HL	409	8	8	
Severe Chronic Heart Dis	HM	334	61	49	
Severe Acute Heart Dis	HS	171	70	66	
Metabolic Electrolyte Disturb.	ME	71	16	9	
Orthopedic Disorders	OD	379	8	5	
Pulmonary Disease	PN	399	65	54	
Renal Disease	RN	39	15	7	
Sepsis	SE	47	13	7	
Severe Trauma	TR	165	11	11	0
	UN		80	55	8
TOTAL		5479 (1)	729	425	215

BVH Blanchard Valley Hospital

William E. Ruse
President

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Sir/Madam:

RE: Blanchard Valley Hospital, Findlay, Ohio
Hospital ID #360095

We have reviewed the information forwarded to us under date of September 21, 1987 by William L. Roper, MD, administrator of the Health Care Financing Administration. This letter is in reference to that data.

While we note that Blanchard Valley Hospital is within the predicted mortality rates in each of the listed diagnostic categories, we do feel it necessary to indicate that we cannot agree with the total number of cases listed by HCFA.

In HCFA's data, 1794 cases are listed. In Blanchard Valley Hospital's data, after comprehensive evaluation, we believe the correct number to be 1958. This would mean there are 164 cases which are unaccounted for in your data.

In arriving at our data, we first took all Medicare admissions to Blanchard Valley Hospital in 1986 and adjusted these admissions by removing the following patients:

1. 6 patients were removed because they were Part B recipients.
2. 69 patients were removed because Medicare was a secondary payor.
3. 1 patient was removed because of the fact that he was an HMO beneficiary.
4. 44 patients were removed because they represented transfers.

After the above deletions, our records reflect 2,660 admissions. We then calculated the number of readmissions within 1986 and reduced these patient admissions to arrive at Medicare cases which would be consistent with the approach used by HCFA. Since there were 702 readmissions, the number of actual cases treated, net of readmissions, was 1,958.

In summary, HCFA's data shows 1,794 cases. Blanchard Valley Hospital's data shows 1,958 cases. There are, therefore, 164 cases unaccounted for in HCFA's data.

The information provided by HCFA shows 206 deaths, while Blanchard Valley Hospital's data shows 215 deaths during the 1986 year. Since our information on the number of deaths is relatively close to HCFA's data, we have to assume that the actual mortality rate for Blanchard Valley Hospital would have been less if the correct number of cases had been utilized.

We would be pleased to share our findings with officials from your organization should you wish us to do so.

We thank you for sharing with us the information you intend to publish in December, 1987.

Sincerely,

William Ruse
William E. Ruse
President

/ck

BROWN MEMORIAL
HOSPITAL
158 WEST MAIN ROAD • P. O. BOX 648 • CONNEAUT, OHIO 44030 • (216) 593-1131

COMMENTS ON THE HCFA MORTALITY DATA
BROWN MEMORIAL HOSPITAL, CONNEAUT, OHIO

Data Verification

The data used by HCFA indicate that of a total of 508 Medicare patients admitted to Brown Memorial Hospital, 64 died within 30 days of admission, of those, 47 died while still a patient of the Hospital, while 17 died after discharge. Our own records indicate that 882 Medicare admission occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Brown Memorial Hospital is correct.

Our own records also indicate that of the 64 Medicare patients who died within 30 days of admission, 48 died while a patient of the Hospital, while 16 died after discharge. Two (2) of the patients who died after discharge were transferred from Brown Memorial Hospital to another acute care facility for further care and therefore, should not be counted in our statistics. According to information received from HCFA, patients included in our statistics should be only those whose last admission was to our facility. The total count of patients who died within 30 days of admission after discharge should be 14.

Our own records show 53 Medicare inpatients deaths for 1986. We verified that the additional 5 inpatient deaths were not due to a coding error by the billing clerk. This discrepancy leads one to question the number of patients discharged alive in 1986 who are not indicated in the data which would affect the mortality percentages.

In addition, it is impossible to determine the validity of the number of deaths occurring outside the hospital. One could question the validity of the HCFA data.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In two of the diagnostic categories, the Hospital's actual mortality rate is below the range of the predicted mortality rate. The Hospital's actual mortality rate is not above the range of the predicted mortality for any diagnostic category.

The Hospital's actual mortality rate for cerebrovascular accident approaches the high end of the predicted mortality range. It should be noted that 8 out of 9 of these patients had "Do Not Resuscitate" orders, indicating the patient or families wishes with respect to extraordinary efforts. This percentage reflects that these deaths were an expected outcome at the time of the patient's hospitalization.

Unique Services Resulting in Higher than Average Mortality Rates

A local factor affecting in-hospital mortality rates is the lack of a hospice program in the area. The community looks to the Hospital to provide care for the terminally ill patient at the time of death.

Results of Medical Record Review

Overall, 72% of the patients who died within 30 days of hospitalization had "Do Not Resuscitate" orders. Again, this indicates the patient's or families' wishes regarding extraordinary efforts and the expected outcome of the patient's condition.

Medical record review shows that for 14 patients, the cause of death differed from the principal diagnosis. As HCFA data is based on principal diagnosis rather than cause of death, these patients are incorrectly accounted for in the mortality rates by diagnostic category.

For 77% of the actual patient deaths, more than four co-morbidities were recorded on the medical records. As only four co-morbidities are reported to the fiscal intermediary, all underlying conditions are not accounted for in determining the predicted mortality range. These patients had multiple systems involved which would affect their overall survival expectancy.

Brown Memorial Hospital
158 West Main Road
Conneaut, OH
Medicare Provider # 36-0042

hcfa

The Christ Hospital

2139 Auburn Avenue | Cincinnati, Ohio 45219 | (513) 369-2000

October 26, 1987

HCFA
Office of the Administrator
Department of Health and Human Services
314G
200 Independence Avenue, S.W.
Washington, D. C.   20201

Subject: RESPONSE TO HCFA MORTALITY DATA

Dear Sir:

The Christ Hospital (provider #360163) welcomes this opportunity to respond to the mortality data release. Upon reviewing the data, we identified certain errors that are worthy of note. In the diagnostic category of cancer we found a discrepancy in the actual mortality rate. The published rate is 20 percent; however, based on a total number of 57, the actual mortality rate is 19 percent. The adjustment places the hospital at the lowest end of the predicted range for cancer cases. A similar error was found in the diagnostic category of pulmonary disease. An actual rate of 19 percent was published, but the total number of 32 mortalities results in a 17 percent actual mortality rate.

A third error was found in our analysis of the cerebrovascular accidents category. The actual mortality rate reported by HCFA represents the last admission of the deceased to an acute care hospital in 1986. Upon reviewing each of the deaths in this category, we found that one death occurred in a nursing home after the patient had been discharged from another hospital. This brings the actual rate down to 17 percent, two percentage points below the predicted range.

The Christ Hospital is a 660 bed not for profit teaching institution, accredited by the JCAHO. The services provided at the hospital include open heart surgery, kidney transplantation, and cancer care. The hospital also offers services typically found at a general acute care facility, such as obstetrics and gynecology, orthopedics and behavioral medicine. In addition,

An entity of The Elizabeth Gamble Deaconess Home Association - affiliated with the James N. Gamble Institute of Medical Research

the hospital is a pilot site for the administration of tissue plasminogen activator (TPA) in the treatment of acute myocardial infarction and cerebrovascular accident patients. In a recent analysis of the September 1, 1987, Federal Register, it was determined that the Christ Hospital is in the top four percent of all 6,083 hospitals in the country ranked by case mix. We believe this is an important fact to consider since the case mix is an indicator of the types of patients admitted to a hospital and the range of diagnoses that can be treated.

Sincerely,

Jack Cook

Jack M. Cook
President
The Christ Hospital

JMC:as

Clermont Mercy Hospital

3000 Hospital Drive
Batavia, Ohio 45103
(513) 732-8200

October 20, 1987

William Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

We are herewith responding to the mortality information provided us with your letter of September 21, 1987, relative to Clermont Mercy Hospital, Batavia, Ohio.

1. Our analysis of the data verifies the information provided indicates that our actual rates for each of the categories identified were neither above or below, but essentially mid-point of the range of predicted mortality rates.

2. It is important to note that in this hospital all deaths, including those patients who died in the Emergency Room, and regardless of the source of payment or age, are reviewed by one physician and then reviewed and discussed in our Pathology Review Committee, a committee of cross section of medical staff categories. Any questions regarding the death and/or the medical case management are brought to the attention of the attending physician who must justify his management of the case. If a problem is found to exist corrective action is taken immediately.

3. We question the validity of the classification because it suggests that the principal diagnosis is the same as the cause of death.

4. In reviewing the list of causes provided we find that 35.9% were terminally ill on admission and 57.0% were found to be terminally ill within 72 hours of admission. Thirty-seven percent of the patients who died were transfers from nursing homes. These figures indicate that there is a need for the study proponents to address the condition of the patient on admission, the role of the hospital in treating high risk patients, and the severity of illness of the patient population in the various diagnostic categories in order to give the public a better understanding of the patient population of a given hospital rather than give the public the false impression that the hospital does not provide quality patient care.

Member of Mercy Health Care System, Province of Cincinnati

5. Data provided by HCFA are not all inclusive and because of this do not reflect the actual mortality rate for the hospital. By including only the last admission of the Medicare patients and only those death occurring within 30 days of admission, an erroneous death rate is calculated, and this is further invalidated by charging those deaths occurring after discharge to the hospital. The hospital has no responsibility for, no control over and can do nothing to prevent the death from occurring or aid in treating the patient in any definitive way after discharge.

6. The purpose of the mortality rate report as noted in your letter of September 21, 1987 is: "...allow user to make judgments on the quality of care provided by individual institutions..." Our understanding is that the data released to us were obtained from the UB-82 billing forms. This is a very inappropriate source of information to use in addressing the care of any patient because of the lack of information on the condition of the patient, the unexplained variations in patient characteristics, any complications present, and the psychological status of the patient. In no way can an invoice for services rendered address the quality of care provided. The existence of quality problems can only be determined by an indepth review of medical records. Follow-up clinical and case management review must be done to determine the actual presence or absence of quality concerns and when and what follow-up action may be appropriate.

7. We have identified a number of discrepancies in the data provided and these are noted on the attached sheets containing the lists provided to us by HCFA. In general, these are:

    a. Discrepancies in ages - corrected age noted.

    b. Four patients listed as death after discharge actually died while inpatients.

    c. One patient charged to us as death after discharge actually died as an inpatient at another acute care facility.

    d. We have identified fifteen additional Medicare patients admitted in 1986 who expired within 30 days of admission. This list is provided.

8. We have provided a corrected summary sheet of cases by diagnostic categories with our corrected actual mortality rate. With these corrections we remain within the range of predicted mortality rates for all categories.

While we cannot agree that publication of these incomplete, untested data will be of any benefit to physicians, professional societies or consumers, we appreciate the opportunity of reviewing the material before it is published and being allowed to voice our concerns regarding its validity and its value.

Sincerely,

Sister Mary George. RSM

Sister Mary George Boklage, RSM
President

SMG:sw

MERCY
HOSPITAL = 960236 CLERMONT ~~COUNTY~~ HOSPITAL * BATAVIA OH

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE Corrected		Corrected	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	1,297	1312*	11 %	11.7%	8 TO 14 %
CA - CANCER	49	53*	20 %	24%	12 TO 38 %
CE - CEREBROVASCULAR ACCIDENTS	30	30	30 %		13 TO 44 %
EY - OPHTHALMOLOGIC DISEASE	6	5	0 %		0 TO 100 %
GC - GASTROINTESTINAL CATASTROPHES	21	21	29 %		6 TO 41 %
GI - GASTROINTESTINAL DISEASE	142	142	7 %		2 TO 11 %
GU - UROLOGIC DISEASE	81	82*	5 %	6%	2 TO 16 %
GY - GYNECOLOGIC DISEASE	5	5	0 %		0 TO 100 %
HL - LOW-RISK HEART DISEASE	126	126	5 %		2 TO 10 %
HM - SEVERE CHRONIC HEART DISEASE	62	63*	19 %	20.6%	13 TO 35 %
HS - SEVERE ACUTE HEART DISEASE	49	52*	47 %	48.0%	24 TO 51 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	15	15	40 %		11 TO 56 %
OP - ORTHOPEDIC DISORDERS	68	69*	0 %	1.4%	0 TO 11 %
PN - PULMONARY DISEASE	135	138*	21 %	23%	12 TO 28 %
RN - RENAL DISEASE	12	12	25 %		6 TO 56 %
SE - SEPSIS	15	16*	20 %	25%	10 TO 55 %
TR - SEVERE TRAUMA	37	37	5 %		3 TO 24 %
UN -	445		4%	4%	

* Additional Cases Identified

CLERMONT MERCY HOSPITAL

The following is a list of those patients we have identified as having died in hospital and within 30 days of admission who are not listed by HCFA

Medical Record #	Surname	Diagnostic Category	Age	Date of Admission	Date of Discharge	Date of Death
		UN	73	1/22/86	1/27/86	1/27/86
		PN	75	2/4/86	2/16/86	2/16/86
		CA	79	2/19/86	2/26/86	2/26/86
		HM	92	3/6/86	3/8/86	3/8/86
		PN	59	12/26/86	3/1/86	3/1/86
		HS	66	4/28/86	4/29/86	4/29/86
		PN	87	4/4/86	4/5/86	4/5/86
		OP	82	5/7/86	5/11/86	5/11/86
		PN	94	6/15/86	6/30/86	6/30/86
		GU	72	6/25/86	6/30/86	6/30/86
		CA	56	7/28/86	7/29/86	7/29/86
		HS	65	10/25/86	10/26/86	10/26/86
		SE	74	10/28/86	10/28/86	10/28/86
		CA	71	10/27/86	11/9/86	11/9/86
		CA	66	10/24/86	11/2/86	11/2/86

COMMENTS ON THE HEALTH CARE FINANCING ADMINISTRATION (HCFA) MEDICARE MORTALITY RATE STATISTICS

We appreciate this opportunity to comment on the HCFA Medicare mortality rate statistics. We agree, as you have stated, that one cannot utilize mortality statistics alone to make judgements on the quality of hospital care. The mortality rate at a given hospital reflects among other things, diagnosis and severity of illness, and the age, sex, and socioeconomic status of the patients admitted there. Some of these factors cannot be measured at all or can only be estimated.

Cleveland Metropolitan General/Highland View Hospital (Metro), a component of the Cuyahoga County Hospital System (CCHS), is a tertiary care center for northeastern Ohio with a mission to serve Cuyahoga County residents without regard to their ability to pay. Metro is also a major academic and research center associated with the Case Western Reserve University School of Medicine.

Metro is a regional burn center, spinal cord injury center and a Level I Trauma Center. It serves as a base for Metro Life Flight, a regional aeromedical transport system. These services both extend the range of Metro's services geographically as well as clinically in comparison with other area hospitals.

Patients from throughout Cuyahoga and adjacent counties who are severely burned, injured or are suffering from other major clinical problems, are either brought directly to Metro or transferred here from other hospitals for specialized treatment not available elsewhere. As a consequence, Metro's case mix is dramatically different from other hospitals in the area.

As part of its extensive quality assurance program, Metro's medical staff reviews all deaths occuring in our institution. The deaths reported by HCFA in the Severe Trauma and Severe Acute Heart Disease categories have undergone an additional review by the clinical leadership of the Departments of Medicine and Surgery. In each case we are confident that the patient received all appropriate and necessary care. We offer the following comments, however, to clarify the reported data and to suggest ways to improve reporting in the future.

SEVERE TRAUMA

Nationwide, burns accounted for under 1 percent of severe trauma cases. A review of our records revealed that patients with third degree burns accounted for 20.8 percent of our Medicare patients in the severe trauma category in 1986 , but 11 of the 15 trauma deaths (73.3 percent). According to data collected by the National Burn Information Exchange*, patients 65 years and older with burns involving over 50 percent of body surface have virtually no chance of survival; those with 40 to 50 percent involvement have only a 2 percent survival probability.

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* Irving Feller, MD, NBIE Burn Patient Survey (Ann Arbor: National Burn Information Exchange, March 1985).

According to our records, 9 of the 11 burn related deaths had over 40 percent involvement, and 6 of them had over 50 percent involvement. This disproportionate number of critically burned patients with little or no chance of survival, pushes CMGH's severe trauma mortality rate just beyond the HCFA predicted range which is based on a national case mix of trauma patients.

Although the HCFA statistical model that was used to predict mortality ranges for each diagnostic category incorporates selected patient characteristics (age, sex, prior hospitalization, transfer status, and the presence of certain underlying chronic conditions or comorbidities) which affect mortality, it does not account for differences in the case mix (the relative number of patients with each diagnosis) within each major category.

We recomend that future Medicare mortality reports should either categorize burn patients separately from other severe trauma, or that hospitals with Burn Centers should be grouped separately for developing the severe trauma mortality rates. There are three compelling reasons for this suggested change:

- among elderly patients, extremely high mortality rates (approaching 100 percent) are associated with extensive third degree burns;
- severely burned patients are transported to regional burn centers and virtually none are treated at other hospitals; and
- there are only 140 organized hospital based burn units in the entire United States.

SEVERE ACUTE HEART DISEASE

Similarly, our status as a public institution and a major teaching and referral center, located in an economically disadvantaged area of Cleveland, distorts our case mix in other diagnostic categories, including severe acute heart disease. For example, five major diagnoses with markedly different fatality rates (ranging from about 15 to nearly 100 percent) are included in the severe acute heart disease category. A review of the medical records of the patients in this category who had died indicated that the majority had diagnoses with expected mortality near 100 percent.

Eight (of 22 deaths listed on the HCFA mortality statistics) sustained cardiac arrest out of the hospital and had significant anoxic encephalopathy (brain damage) which contributed to their deaths. Eight other patients, including three transfers from other hospitals presented in cardiogenic shock (terminal heart failure) and died of this problem. Three of the 16 patients were transported here by Metro Life Flight, the only helicopter transport service which carries the intra-aortic balloon pump. We urge that future Medicare mortality reports should control for case mix differences within diagnostic categories when case fatality rates differ significantly and when some institutions have markedly different case mixes.

GENERAL COMMENT

Finally, beyond specific diagnostic categories, there is the need to account overall for the socioeconomic characteristics of the patient population of institutions that serve a disproportionate share of the poor and disadvantaged. These persons have a higher incidence of social and health problems which result in increased morbidity and shortened life expectancy.

METRO is a "disproportionate share" hospital under Medicare and serves about one-half of Cuyahoga County's uninsured population. This element of "patient mix" also influences medical outcomes and needs to be accounted for in any discussion of gross mortality statistics.

Submitted by:
Cleveland Metropolitan General/
Highland View Hospital
3395 Scranton Road
Cleveland, Ohio 44109

360059

COMMITTED TO IMPROVED HEALTH CARE
CMH

Clinton Memorial Hospital
610 West Main St., Wilmington, Ohio 45177 (513) 382-6611

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
6325 Security Blvd.
Baltimore, MD 21207

Dear Dr. Roper:

Re: Medicare Provider #36-0175

In reply to your transmittal of September 2, 1987, we will comment first on several data inaccuracies.

We find in Diagnostic Category GC, Gastrointestinal Catastrophes, that you identify four patient deaths as occurring in our hospital. Review of these four patient records reveals that one of the four did not die in-hospital, but was discharged alive.

This same type of error appears in Diagnostic Category PN, Pulmonary Disease, where we find that your data shows 19 deaths in-hospital. Again our medical records show that one patient in this group did not die but was discharged alive.

And in Diagnostic Category UN, Other Diagnoses, you have credited us with seven in-hospital deaths which upon review become six since one patient in your list was never a patient in our hospital.

However, our major concern lies with Diagnostic Category HS, Severe Acute Heart Disease. Of the 16 categories this was the only one in which our actual mortality rate exceeded the HCFA predicted range. Here we exceeded the predicted level by 4%. Using accredited indicators of quality of patient care we reviewed all of these Category HS deaths and found that all cases received a very high level of professional care.

We are aware that having a higher than predicted death rate does not indicate the giving of sub-standard patient care, but we are unsure that the general public is also educated to this truth.

We applaud the statement in your letter that you do not recommend the use of mortality information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals.

It is our hope that this point of view will receive emphasis when you release the selected mortality information to the general public.

Sincerely,

Thomas F. Kurtz
President

TFK:cb

Cuyahoga Falls General Hospital

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

We have recently received the mortality statistics published by the Health Care Financing Administration (HCFA) which are scheduled for release in December 1987. We are pleased to offer comments for the publics review as to the validity and use of this data in evaluating the quality of health care.

Cuyahoga Falls General Hospital views seriously its responsibility to the public regarding the assurance of the quality of health care. Further, we concur with HCFA in that we believe the public has a right to the information regarding quality of the hospitals serving them and we are pledged to working with the public in order to assure that they receive the information that is appropriate in that evaluation process.

In that light, we question the release of raw mortality data with the implication that it serves as an evaluation of quality.

We have several concerns regarding the statistics themselves. First, it is not possible to determine if the rates of mortality included are due to the quality of care rendered in the hospital, or the conditions of the patients that are included.

Secondly, the inclusion of deaths after the discharge of the patient from the hospital can implicate the hospital in circumstances over which the hospital has absolutely no control.

Third, statistical errors appear in the data itself. Specifically, the same patient has been reported more than once in a given diagnostic category.

Finally, the use of mortality as the sole indicator of quality is inappropriate.

In summary, Cuyahoga Falls General Hospital is fully aware of its responsibility to the public in the provision of quality health care. For the reasons enumerated above, we cannot agree that the issuance of statistical information in a manner such as this is appropriate or serves the public interest.

Thank you for giving us the opportunity to comment.

Sincerely,

Richard A. Royer
President

RAR:mn

THE DEACONESS HOSPITAL
311 STRAIGHT ST. CINCINNATI, OHIO 45219 513-559-2117

VICE PRESIDENT FOR PROFESSIONAL SERVICES

dh

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir or Madame:

I am writing on behalf of the Deaconess Hospital in Cincinnati, Ohio, to comment on the recent mortality data submitted by HCFA this past month. Although the statistics provided indicate the hospital's being well within the predicted range of mortality rates both for total cases and each of the high risk categories, the following points may be beneficial for your review:

- Statistical data submitted: We have verified that the HCFA reported admissions and deaths at discharge (and 30 days after discharge) were essentially correct with a nominal number of incorrect dates of death as well as patients listed as dead at discharge. Nine patients, or three percent of those listed, had significant variances from the data reported. Of course, there is a large discrepancy between the reported Medicare beneficiaries whose last admission was to the hospital in 1986 (2,088) and the actual number of Medicare admissions to the hospital during that same year (4,424). This is possibly due to the high number of transfers and referral relationships that Deaconess has with other area hospitals, nursing home, skilled nursing facilities and other providers.

- Data interpretation and comment on hospital services: The HCFA data indicates the hospital is well within mortality rates in all cases. It should be noted, however, that Deaconess Hospital has specifically targeted the Medicare population as a key segment of the community to which it wishes to provide service. Approximately 70% of the hospital's patient days are generated by Medicare beneficiaries, many with high acuity. It should be noted that all of the patients listed in the HCFA data were, upon the hospital's review, found to have multiple medical complications present at their stay at the hospital. The average age of the patients in the data set was 79.662 years. In addition, nearly 15% and 38% were above the ages of 90 and 80 years old, respectively. As a result, the hospital has frequently experienced higher acuities in diagnostic categories such as pulmonary disease and acute heart disease which are frequently prevalent among the aging population. In addition, the hospital implemented an open heart surgery program in 1986, which has attracted Medicare patients of a far higher acuity for cardiovascular procedures.

Although it is known that the interpretation of the mortality data is not necessarily an overall indication of hospital quality, Deaconess Hospital is encouraged by the fact that mortality rates fall well within the predicted ranges established by HCFA. Hopefully the above comments will assist you in current and future interpretations of mortality data for Deaconess Hospital and other hospitals in this region.

Sincerely,

Jim Stewart

JIM STEWART
Vice President for Professional Services

Deaconess Hospital

October 21, 1987

Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

SUBJECT: HCFA Mortality Statistics--1986
Deaconess Hospital of Cleveland
Hospital No. 360102

We have reviewed the mortality statistics on Deaconess Hospital of Cleveland's Medicare patients and have noted discrepancies between our records and the data supplied on 23 of the 198 Medicare patients who died within 30 days of their last admission in 1986.

Corrections are as indicated on the attached.

We would appreciate the opportunity to review the revised summary statistics prior to public release of this data.

Sincerely,

Steven J. Diedrich
Vice President, Planning
and Corporate Development

SJD/be

Enclosure

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

4229 PEARL ROAD CLEVELAND OHIO 44109 (216) 459 6300 TTY 459 6799 A SELF GOVERNING HOSPITAL IN THE HERITAGE OF THE UNITED CHURCH OF CHRIST

Dettmer Hospital Inc.
3130 North Dixie Highway
Troy, Ohio 45373

Phone: (513) 335-5624
Piqua: 773-9841
Covington: 473-3063

Greenville: 548-0323
West Milton: 836-4100
Englewood: 836-9733

Dettmer

October 22, 1987

COMMENTS ON THE HCFA MORTALITY DATA

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

The data used by HCFA indicates that a total of 58 Medicare patients were admitted to Dettmer Hospital and died within 30 days of admission. Of these, 41 died while still a patient, or 71%, and 17 died after discharge, or 29%. Our records indicate that your figures are correct. Of those who died after discharge from the hospital, information obtained for the county death listing and attending physicians indicates that your figures are correct.

In one of the 8 diagnostic categories, the hospital's actual mortality rate falls below the range of the predicted mortality rate. Our percentage for category RN was 0%, with a range of 3 to 77%. We had 4 patients die in this category for a 0.7% range. I cannot explain this difference.

Doctors Hospital
1087 Dennison Avenue/Columbus, Ohio 43201-3496/614-297-4000

October 26, 1987

Medicare Provider No. 36-0152

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 309-G
200 Independence Avenue S.W.
Washington, D.C. 20201

Dear Dr. Roper:

The delivery of high quality patient care is top priority at Doctors Hospital. We support efforts to further improve the quality and by no means object to the release of appropriate and meaningful quality measurements.

However, the mortality data proposed for release by HCFA is not an appropriate measure of the quality of care provided in our nation's hospitals. The release of this data has the potential for confusing the public and provides media the opportunity to inappropriately compare mortality statistics among hospitals.

The information, if released, must be accompanied with pronouncements that many factors need to be considered in reviewing the HCFA calculated mortality rates, including:

1. The HCFA study, which only includes medicare patients, does not accurately reflect the overall mortality experience of the hospitals.

2. Many medicare patients require more than one hospital admission in a period of 12 months, but only one admission for the study year has been utilized in calculating the HFCA rates.

DOCTORS HOSPITAL'S ACTUAL MORTALITY RATE FOR MEDICARE PATIENTS FOR THE CALENDAR YEAR 1986 WAS 6.49%.

3. Many of the deaths included in the study occurred after discharge from the hospital and may have been caused by factors unrelated to the hospital stay.

(cont'd.)

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4. The levels of care provided at different hospitals vary greatly. Large teaching tertiary hospitals will generally have a higher mortality rate than community, general secondary hospitals because the patients are generally more critically ill. The tertiary hospitals provide numerous sophisticated sub-specialty services which are unavailable in many smaller community general hospitals. These services may include hospice, vascular surgery, neurosurgery, cardiothoracic (open heart) surgery, end-stage renal dialysis, organ transplant capabilities, intensive cardiology services, high tech intensive, coronary and surgical intensive care units, etc. Therefore, mortality rate comparisons among hospitals should not be made--hospitals are different.

5. Quality of care is currently subject to hospital internal review by Peer Review and Quality Assurance Committtees as well as external review by Professional Review Organizations. These methods provide the best opportunity to identify quality concerns. The release of the HCFA mortality information will not promote better quality.

6. Conclusions about the provision of quality care should not be based upon mortality statistics for a one year period. The mortality experience for a hospital could be unusually high or low for this year--trends over time will be more meainingful.

7. In addition to including data for 1986, HCFA has included mortality experience of patients admitted in December 1985. There is no indication that all December 1985 medicare admissions have been utilized in calculating the mortality rates for individual hospitals.

Many other issues should be addressed by HCFA prior to the release of the mortality rates and I am certain other hospitals or associations have included them in their responses.

The health care provided in the U.S. is superior to that anywhere in the world. Significant efforts have been, and continue to be, made to identify quality of care concerns and improve even further the care provided by the nation's health care providers. The HCFA mortality data does not accurately measure the quality of care provided and does not demonstrate an appropriate means of comparing the quality of care among hospitals.

(cont'd.)

We strongly encourage HCFA to develop a more appropriate and easier to understand method of measuring quality. Health care providers welcome the opportunity to work with HCFA and others to improve upon the high quality patient care provided.

Sincerely,

Richard A. Vincent
Executive Vice President
Hospital Operations

RAV:rg

cc: Mr. Richard L. Sims, President
Dr. Clifton Cage
Dr. Richard Bracken
Mrs. Marge Crable, Peer Review
Mrs. Betty Garard, Medical Records

DOCTORS HOSPITAL, INC.
OF STARK COUNTY • AN OSTEOPATHIC HOSPITAL

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400 AUSTIN AVENUE N.W. • MASSILLON, OHIO 44646 • (216) 837-7200

October 26, 1987

William L. Roper, M.D.
Administrator Health Care Finance Corp.
Hubert H. Humphrey Building, Room 314G
200 Independence Ave., S.W.
Washington, D.C. 20201

Dear Dr. Roper:

The mortality statistics published with this printing must not be considered as a sole indicator of quality of care, regardless of the institution to which they may be applied. Doctors Hospital of Stark County appreciates the great effort applied to produce a report of this type; and recognizes the potential for error in reporting and calculation. Some discrepancies have been identified. Specifically, the number of Medicare patients treated in this facility during 1986 (1453) was significantly higher than reported (1182) even after the adjustment for re-admissions. This figure alone would result in an 11.6% actual mortality rate as opposed to the 14% reported by HCFA.

The seventy skilled family physicians and specialists on staff of this community hospital provide medical care for over 500 patients confined to nursing homes in the Stark County area. Often these patients with chronic degenerative conditions may be admitted to the hospital shortly before death for terminal supportive care. In this situation, because of the patient's medical condition it may be said that death was the anticipated outcome of that hospital admission. A case review of the Medicare deaths during this reporting period revealed that the decision had been made by the patient and/or family to provide supportive care in 62% of the cases. Of the thirty-nine (39) mortalities reported after discharge, but within 30 days of hospitalization, a significant number had also chosen end-stage care utilizing hospice, home health or nursing home supportive care.

A quality assurance program has been on-going that includes a plan to evaluate every death in this facility and beyond that a program of review has been developed that provides information for continual clinical evaluation and monitoring.

We are aware that these reports may be subject to misinterpretation and that the validity of the relationship between mortality rates and hospital quality of care is weak. Despite the disadvantages of this reporting format we at Doctors Hospital respect the purposes set forth by HCFA and thank you for the opportunity to clarify this mortality data.

Respectfully,

Barbara Edwards R.N.

Barbara Edwards, R.N.
Assistant Vice President
Resource Management

BE/llr

DOCTORS HOSPITAL
OF NELSONVILLE

* Medicare provider number: 360067 *

W. FRANKLIN STREET/NELSONVILLE, OHIO 45764
(614) 753-1931

The data used by HCFA indicates that a total of 303 Medicare patients were admitted to Doctors Hospital of Nelsonville (DHON), and that 49 of those patients died within 30 days of admission. Our own records indicate that 610 Medicare admissions occurred in 1986. Presumably, the discrepancy reflects multiple admissions of individual patients and the fact that if a patient was transferred to another hospital at the end of their admission to DHON, the first admission to DHON is not counted. It is our opinion that this is not consistent with accepted statistical methods. The number of times something could have happened should be divided by the number of times that it actually did happen. For example, the number of true admissions should have been divided by the number of deaths. Any Medicare patient admitted to this hospital theoretically has the possibility of death, even if they were transferred at the end of their admission to another hospital. Thus, the actual number of admissions would be higher than 303, even after adjusting for re-admissions, whereas the number of deaths will stay the same.

Of the 49 deaths that HCFA has attributed to this hospital, 38 died while still a patient of the hospital, while 11 died after they were discharged from the hospital. This is due to the fact that HCFA uses a 30-day post admission mortality rate that attributes deaths to a hospital if death occured 30 days after admission, no matter where that death occured. The 30-day post-admission mortality rate will result in the attribution to the hospital of deaths that may be unrelated to the condition of the patient that was under treatment at the time of discharge. It will also attribute deaths that resulted from the management of the patient at home, in a post-acute care facility, or in a nursing home.

Doctors Hospital's mortality rate lies well in the lower edge or middle of the range of predicted mortality rate for all of the diagnosis, except severe acute heart disease. In this category, the hospital's actual mortality rate falls 2% above the range. As stated by the American Hospital Association, several factors may account for this difference. For instance, there are two sources of uncertainty in HCFA's model statistics or range of predicted mortality rates. The first is simply chance. Because, at best, the model can only predict the chances of death, the actual number of patients who die can vary. The second is that the HCFA model does not consider all factors that influence the risk of death. The patient characteristics used by HCFA in the analysis to calculate the expected mortality rate does not include such items as the patient's general health status, the stage of the patient's illness, the patient's psychological condition, family support, the desire of the patient or family for no extraordinary life saving efforts such as CPR, shortage of nursing home beds in the area, whether or not the patient is a smoker or has a terminal disease, or if the patient was not expected to live after admission.

This sort of statistical analysis can do no more than identify potential areas for further evaluation. Such data cannot be used directly as a measure of hospital performance. Doctors Hospital's Quality Assurance Committee has reviewed the medical records of patient who have died in the category of severe acute heart disease since this category was 2% over the predicted mortality rate. We have found that of the 8 patients who died in this category, all of the deaths can be attributed to various HCFA's model factors along with any of the following factors:

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DOCTORS HOSPITAL
OF NELSONVILLE

W. FRANKLIN STREET/NELSONVILLE, OHIO 45764
(614) 753-1931

The average age was 78.5. (Range 67 to 97.)

6 of the 8 patients were managed by internal medicine specialty.

7 of the 8 patients had a long standing chronic history of coronary artery disease, a disease which is known to cause myocardial infarctions (heart attacks) which is what all 8 of these patients died from.

7 of the 8 patients had three or more other complicating conditions or diagnoses in addition to the myocardial infarction for which they were all admitted.

2 of the 8 patients had a terminal disease such as cancer.

3 of the 8 patients had expressed a desire for no extraordinary life saving efforts such as CPR.

All 8 patients had a poor prognosis upon admission and were not expected to live considering their diseases.

7 of the 8 patients were being taken care of at home prior to admission, of which two were recommended to be taken care of in a nursing home which the families refused. One patients was being taken care of at a nursing home before admission.

4 of the 8 patients were long time smokers.

3 of the 8 patients had co-existing psychological circumstances such as senile dementia, or bereavement for close relatives.

It has been proven in various studies, as noted in "Heart Disease, A Textbook of Cardiovascular Medicine" edited by Dr. Eugene Braunwald, M.D., page 1827, that there is an increased incidence of death in patients with coronary artery disease when the above listed factors influence their lives.

In conclusion, we feel that since there are so many other factors influencing death other than those used in the HCFA model, and that the death rate at DHON of severe acute heart disease patients is only 2% over the predicted rate, that this does not indicate a compromise in the quality of care given to these patients at Doctors Hospital of Nelsonville.

cc: Ohio Hospital Association

EAST LIVERPOOL CITY HOSPITAL

425 West Fifth Street
East Liverpool, Ohio 43920

BRUCE NIELSEN
President

Telephone 216/385-7200

MEDICARE PROVIDER #36-0096

October 27, 1987

Dr. William L. Roper, Administrator
Health Care Financing Administration
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We at the East Liverpool City Hospital take special pride in the fact that the actual mortality rate reported by the Health Care Financing Adminstration for Medicare patients disclosed that in every case our rate was within the range of mortality rates predicted by the Health Care Financing Administration. We take particular satisfaction in this report because we believe that it is a clear indication of the quality of care provided at the East Liverpool City Hospital and the effectiveness of our quality assurance programs, even without taking into consideration the severity of the illness which was the reason for the patients admission to the hospital and the economic status of the Medicare age population in our service area.

We believe that it is also worthy of note that our data as analyzed by the Commission on Professional and Hospital Activities revealed that our mortality rate for all patients (Medicare and non-Medicare) is less, and has been less for years, than it was predicted to be by their statistical measures.

Respectfully,

Bruce Nielsen
President

BN/kw

EMH

ELYRIA MEMORIAL HOSPITAL • 630 East River St. • Elyria, OH 44035 • 216/323-3221

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
c/o Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: Medicare Provider No. 36-0145
Commentary on 1986 HCFA Mortality Data

Dear Dr. Roper:

This will serve as the Elyria Memorial Hospital and Medical Center's response to its review of Health Care Financing Administration's mortality data. As much commentary has already been written about the model, and its inability to respond to patient severity, I shall restrict my comments to the quality of Elyria Memorial Hospital's actual mortality data.

In calendar year 1986, the Health Care Financing Administration reviewed the last admission of 1923 of its Medicare beneficiaries. This figure appears to reasonably accurate. Of those admissions, a total of 219 patients expired within 30 days of admission. Of those 219 patients, according to HCFA records, a total of 71 patients expired within 30 days of admission but after discharge from the hospital.

There appear to be 9 discrepancies in the reporting of individuals who expired within 30 days of admission but after discharge from the Elyria Memorial Hospital and Medical Center as follows:

1. Of the nine discrepancies, 5 patients expired in the hospital on the stated discharge date rather than after the discharge date noted by HCFA.
2. Two patients were readmitted after the stated discharge date and expired in the hospital on the stated date of death.
3. One patient expired in February 1987, rather than in February 1986 as originally reported in the HCFA data.

EAST LIVERPOOL CITY HOSPITAL

425 West Fifth Street
East Liverpool, Ohio 43920

BRUCE NIELSEN
President

Telephone 216/385-7200

MEDICARE PROVIDER #36-0096

October 27, 1987

Dr. William L. Roper, Administrator
Health Care Financing Administration
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We at the East Liverpool City Hospital take special pride in the fact that the actual mortality rate reported by the Health Care Financing Adminstration for Medicare patients disclosed that in every case our rate was within the range of mortality rates predicted by the Health Care Financing Administration. We take particular satisfaction in this report because we believe that it is a clear indication of the quality of care provided at the East Liverpool City Hospital and the effectiveness of our quality assurance programs, even without taking into consideration the severity of the illness which was the reason for the patients admission to the hospital and the economic status of the Medicare age population in our service area.

We believe that it is also worthy of note that our data as analyzed by the Commission on Professional and Hospital Activities revealed that our mortality rate for all patients (Medicare and non-Medicare) is less, and has been less for years, than it was predicted to be by their statistical measures.

Respectfully,

Bruce Nielsen
President

BN/kw

EMH

ELYRIA MEMORIAL HOSPITAL • 630 East River St. • Elyria, OH 44035 • 216/323-3221

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
c/o Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: Medicare Provider No. 36-0145
Commentary on 1986 HCFA Mortality Data

Dear Dr. Roper:

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In calendar year 1986, the Health Care Financing Administration reviewed the last admission of 1923 of its Medicare beneficiaries. This figure appears to reasonably accurate. Of those admissions, a total of 219 patients expired within 30 days of admission. Of those 219 patients, according to HCFA records, a total of 71 patients expired within 30 days of admission but after discharge from the hospital.

There appear to be 9 discrepancies in the reporting of individuals who expired within 30 days of admission but after discharge from the Elyria Memorial Hospital and Medical Center as follows:

1. Of the nine discrepancies, 5 patients expired in the hospital on the stated discharge date rather than after the discharge date noted by HCFA.
2. Two patients were readmitted after the stated discharge date and expired in the hospital on the stated date of death.
3. One patient expired in February 1987, rather than in February 1986 as originally reported in the HCFA data.

4. One patient expired while an Inpatient at another hospital.

The total number of individuals to expire within 30 days of admission but after discharge from the Elyria Memorial Hospital is therefore 62, rather than 71.

An analysis of the 62 deaths indicates the following:

1. Nineteen patients were brought to the hospital Dead on Arrival. A review of their deaths indicates that the cause of death was related to the inpatient diagnosis.

2. Thirty-one patients were discharged to nursing homes. All of these deaths but one was verified as occurring in the nursing home.

3. Two patients were transferred to other facilities. Physician notes on the patient record verified deaths at these facilities.

4. Ten patients were discharged to their homes. Of these 10 discharges, 8 of the patients expired within 30 days of admission, and their deaths appear to be correlated to the discharge diagnosis. Of the 2 patients who were discharged to their homes and expired within 30 days of admission, one patient died as a result of smoke inhalation in a house fire. In this case, the cause of death was unrelated to the hospital admission. In addition, the Hospital was unable to find the death record of, and verify the death of one patient.

In summary, it would appear that of the 219 deaths assigned to the Elyria Memorial Hospital and Medical Center, three are in question as follows:

1. One patient expired in February 1987 rather than February 1986.

2. One patient expired in another facility.

3. One patient expired as a result of an accident outside the facility unrelated to the hospital admission.

The above represents the Elyria Memorial Hospital and Medical Center's comments regarding the Health Care Financing Administration's mortality data. In the event the Health Care Financing Administration should wish to verify any of the above information, the hospital will provide the same upon request.

Respectfully submitted,

Donald R Taylor

Donald R. Taylor
Administrator

DRT/smm

FAIRVIEW GENERAL HOSPITAL
PROVIDING A CIRCLE OF CARE

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD. 21207

Dear Sirs:

Fairview General Hospital is in receipt of the selected mortality information mailed by your office on September 21, 1987. We have reviewed these data and wish to share the following information and conclusions.

Fairview General Hospital exemplifies the best in American community hospitals, offering a full range of high quality medical services. Fairview General has 519 acute care beds, including a 16-bed coronary care unit, a 16-bed intensive care unit, and a 14-bed neonatal intensive care unit. Fairview provides 24-hour inhouse coverage by associate physicians in most major clinical areas. Fairview also sponsors medical residency programs.

Fairview has reviewed the data supplied by your office for accuracy. It was our finding that in six per cent of the cases our hospital records disagreed with the information supplied by your office. Disagreements in the data involved the following specifics:

- Patients with no record of a 1986 admission or death at Fairview General Hospital.
- Patients with recorded dates of admission to Fairview General Hospital after the date of death listed in your data.
- Patients with hospital records showing a date of death prior to 1986.

These disagreements between your data and our records are highly troublesome to Fairview General Hospital.

Another finding is that nearly 25% of the recorded deaths occurred following the hospital stay at Fairview General. These patients were either transferred to another institution or discharged home. It is impossible for Fairview to determine if any relationship exists between the medical condition treated by Fairview and the subsequent cause of death. Moreover, it appears that these cases do not lead to any relevant conclusions about the quality of care provided by Fairview General. Obviously, all of these patients were deemed to be in stable condition prior to discharge.

18101 Lorain Ave. • Cleveland, Ohio 44111-5656 • (216) 476-7000
A subsidiary corporation of Health Cleveland

Page Two

Another significant finding is that many of the patients listed in your data set expired shortly after arrival at Fairview General Hospital. These patients were obviously in grave condition upon arrival. The most illustrative example of this situation is in the category of severe acute heart disease. Over 25% of the patients in this category expired shortly after arrival at Fairview General. Further analysis reveals that the majority of these patients (65%) expiring shortly after arrival were brought to Fairview General by community paramedic services.

Fairview General Hospital is dedicated to ensuring the quality of patient care. Fairview is a fully accredited institution which meets Joint Commission standards. Fairview has a very sophisticated quality assurance system in place. This system provides for the review of all patient care activities. The cornerstone of this system is review of all mortalities for appropriateness of care during the hospital stay. This review allows Fairview and its medical staff to evaluate all aspects of patient care and continue to bring about improvements in that care.

Thank you for allowing Fairview General Hospital to comment on these data prior to public release.

Sincerely,

Thomas LaMotte

Thomas LaMotte
President

FAYETTE
County Memorial Hospital

October 27, 1987

William L. Roper, M.D.
Administrator, Health Care
Financing Administration
Department of Health & Human Services
Washington D.C. 20201

RE: Mortality Information for 1986 Medicare Patients
Public Release, December, 1987

Dear Dr. Roper:

Thank you for the opportunity to offer comments for publication with the 1986 mortality data of our hospital.

The data collected and used by HCFA indicates a total of 715 Medicare patients were admitted to Fayette County Memorial Hospital in 1986 with a 16% mortality rate. These 715 patients were based on the patients' last admission. Our actual total of Medicare patients admitted was 1127, which would bring the percentage of deaths down to 10%. It should be noted that HCFA's figures show us to be within the projected norm.

Of the list of actual deaths reported by HCFA, 28 of these were out of hospital, therefore, lost to us for follow-up in most cases. We cannot prove that their deaths were related to hospitalization at our hospital.

Although our overall death rate fell within the projected range, one specific category, severe chronic heart disease, fell 1% over the predicted range. We conducted a chart review of these patients.

In this group of 52 admissions with severe chronic heart disease, there were 20 deaths: nine of the twenty patients and/or families requested a "Do Not Resuscitate" order, and five of the 20 died outside the hospital. All of the patients who died had other severe chronic illness such as diabetes, hypertension and chronic lung disease that had related effects on the patients.

Also, in our review, we found the average age of the patients who died was 82.9, well above the currently predicted life span. The patients in the category ranged from 67 to 96 years of age.

(continued)

1430 Columbus Ave. Washington Court House, OH 43160 614/335-1210

The average age of our patients does have an adverse affect on the hospital's death rate. According to the U.S. Census Bureau statistics our county has a heavy population of elderly citizens (15% +65). We have an abundance of nursing home beds with patients from our county and the contiguous county areas; we are the only hospital in the county with a primary service area which extends well into five contiguous counties. Also, our Medicare admissions are currently running 52% (as of September, 1987) of all admissions.

It is our opinion that there are a number of factors other then the death rate in the hospital which need evaluating before one can determine the quality of care in an institution. In our case, because of the age of our patient population, our incidence of death could be higher then another small hospital in a rural setting. Determining quality of care is a complex problem and cannot be solely based on a death rate.

Sincerely,

H. James Graham
Administrator

HJG/jmw

FAYETTE
County Memorial Hospital

October 27, 1987

William L. Roper, M.D.
Administrator, Health Care
Financing Administration
Department of Health & Human Services
Washington D.C. 20201

Provided #360177

Dear Dr. Roper:

We have identified four additional deaths in 1986 in our hospital:

[redacted] Exp. 6/28/86, 75 yr. old male - Cancer

[redacted] Exp. 6/6/86, 85 yr. old female - CVA-no code

[redacted] Exp. 12/14/86, 73 yr. old male - Cancer-no code

[redacted] Exp. 12/18/86, 90 yr. old male - CHF-no code

In the HM category - Severe Chronic Heart Disease, we found two patients who were transferred to other hospitals, and question whether we should be charged with these deaths and whether the other hospitals are similarly charged -- causing a duplication. They are:

[redacted] - to Kettering Memorial, Dayton, Ohio

[redacted] - to VA facility, Dayton, Ohio

If we have followed the calculations correctly, we do not feel that these errors will greatly affect our overall mortality rate.

Sincerely,

Jim Graham

H. James Graham
Administrator

HJG/jmw

1430 Columbus Ave. Washington Court House, OH 43160 614/335-1210

FTMC Fisher-Titus Medical Center
272 Benedict Avenue
Norwalk, Ohio 44857
419/668-8101

22 October 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Comments on HCFA Mortality Data
Fisher-Titus Medical Center
Norwalk, Ohio

Gentlemen:

Following is a summary of the comments of Fisher-Titus Medical Center on the HCFA Mortality Data for our Hospital.

Data Verification

The data utilized by HCFA indicate that a total of 813 medicare admissions occurred in our facility in 1986. After adjusting our admissions to reflect only the last admission of the year, our records indicate 948 actual medicare admissions. If this figure is used it would decrease our overall mortality rate to 12%.

In the diagnostic category of low risk heart disease, one patient, [redacted] was transferred to another short term, acute care hsopital prior to her death. Adjusting our statistics to reflect this transfer would decrease our death rate in the category of low risk heart disease to 10%.

Because this statistical analysis does not consider the cause of death, but rather the principle reason for admission, the validity of the statistical prediction of death needs to be reconsidered. For instance, in the area of low risk heart disease, while our facility was within the predicted mortality range, five of the eight patients who died, actually died of a complication of long term chronic lung disease, cor-pulmonale.

Thank you for your consideration of this additional data. If I may provide any further information, please do not hesitate to let me know.

Sincerely yours,

Richard C. Westhofen,
President

cc Ohio Hospital Association

Fisher-Titus Memorial Hospital • Norwalk Memorial Home

Fort Hamilton
Hughes
Memorial Hospital Center

630 Eaton Avenue
Hamilton, Ohio 45013
[513] 867-2000

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

HCFA MORTALITY RATES

This correspondence is being written only to notify HCFA of apparent discrepancies in the patient data for our hospital (# 360132). We do not wish to comment for the public record.

According to our records the date of death is incorrectly listed for:

Patient ID	Surname	Date of Death Listed	Should Be
[redacted]	[redacted]	5/6/86	5/5/86
[redacted]	[redacted]	6/28/86	6/27/86

Also we are unable to identify the following patient as ours.

Patient ID	Surname	Admit	Discharge	Death
[redacted]	[redacted]	11/16/86	11/23/86	11/23/86

EUGENE A. WOLKE
DIRECTOR OF QUALITY ASSURANCE/
RISK MANAGEMENT

wp

COMMENTS ON THE HCFA MORTALITY DATA
FULTON COUNTY HEALTH CENTER WAUSEON, OHIO
HOSPITAL ID NUMBER: 360069

The data used by HCFA indicates that a total of 588 Medicare admissions occurred in 1986. Additionally, the data indicates that a total of 69 Medicare patients admitted to Fulton County Health Center (FCHC) died within thirty days of admission. Of these, 47 beneficiaries died while still a patient in the hospital, while 22 died after discharge. Our own records indicate that 1000 Medicare admissions (901 admissions + 99 readmissions) occurred in 1986 and 74 beneficiaries died within thirty days of admission. Of these, 54 beneficiaries died while still an inpatient and 20 beneficiaries died after discharge.

DATA VERIFICATION

It is impossible to verify the accuracy of the HCFA data without the detailed information concerning the billing data available to HCFA.

Areas of discrepancy between the HCFA data and our own data include:

1) Medicare admissions: HCFA - 588
FCHC - 901 (1000 admissions - 99 readmissions)
Difference - 313 admissions

2) Total Medicare deaths: HCFA - 69 (Inpatients - 47 After discharge - 22)
FCHC - 74 (Inpatients - 54 After discharge - 20)

3) Overall mortality rate: HCFA - 12% (using HCFA data)
FCHC - 8% (using FCHC data)

4) Two Medicare patient deaths were included in the HCFA data for inpatient deaths at our facility that our facility transferred to another acute care facility for further care. According to the information presented with the HCFA data, deaths would be attributed to the last hospital that admitted a patient prior to deaths occurring within thirty days of an admission.

5) One Medicare patient death included in the HCFA data was a patient admitted in 1985. According to the information presented with the HCFA data, only those patients admitted in 1986 would be included in the statistics. (A death in January, 1987 could be possible for a patient admitted in December, 1986.)

INTERPRETIVE DATA

According to the HCFA data, the mortality rate for FCHC falls within the range of predicted mortality for thirteen of the diagnostic categories and falls below the range of predicted mortality for three of the diagnostic categories. None of the mortality rates are higher than any of the predicted mortality rates.

The statistics developed by HCFA do not take into consideration many factors that can have a significant impact on mortality. These factors may include: 1) the patient's general health status, 2) the stage of a patient's illness, 3) the patient's psychological condition and 4) the support systems of the patient, to name a few.

An example of a factor not considered by HCFA in their analysis is patients that have a "do not resuscitate" (DNR) order as part of their care. DNR orders are written for patients whose general health status and prognosis is considered very poor. (The wishes of the family and patient are also taken into consideration prior to implementing a DNR order.) Analysis of the medical records of those patients whose death was included in the HCFA mortality data indicated that 54% of the patients had DNR orders written at some point during their hospital stay. Using our hospital data, 57% of the patients had DNR orders. These percentages indicate that over one-half of the patients that died were expected to die. Therefore, emphasis must be placed on the fact that the HCFA data is not an accurate measure of hospital performance or of the quality of care provided by a health care facility.

In general, the HCFA data may be used as a tool by health care facilities to screen for further review because the data may raise some questions regarding mortality and quality of care. However, it can not be stressed enough that the data in no way answers these questions or reflects the quality of care provided by any health care facility.

HOSPITAL ID NUMBER = 360069

MEDICARE DEATHS NOT INCLUDED IN HCFA DATA

PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	PRINCIPAL DIAGNOSIS	PRINCIPAL PROCEDURE
[redacted]	[redacted]	HS	088	M	10/21/86	10/23/86	10/23/86	4104	9393
[redacted]	[redacted]	HS	080	F	10/29/86	10/31/86	10/31/86	4107	
[redacted]	[redacted]	HS	065	F	07/14/86	07/15/86	07/15/86	4109	
[redacted]	[redacted]	HM	080	F	01/24/86	02/03/86	02/03/86	4280	
[redacted]	[redacted]	HM	055	M	04/28/86	05/02/86	05/02/86	4280	
[redacted]	[redacted]	PN	073	M	01/27/86	02/05/86	02/05/86	486	
[redacted]	[redacted]	PN	091	F	12/08/86	12/11/86	12/11/86	486	
[redacted]	[redacted]	PN	082	M	01/16/86	01/17/86	01/17/86	486	

OH 71.2

HOSPITAL ID NUMBER = 360069

MEDICARE DEATHS INCLUDED IN HCFA DATA THAT ARE NOT PART OF OUR DATA

PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	PRINCIPAL DIAGNOSIS	PRINCIPAL PROCEDURE
[redacted]	[redacted]	GC	067	F	12/11/86	12/15/86	12/22/86	5722	5491
[redacted]	[redacted]	UN	074	F	08/21/86	08/23/86	08/23/86	2830	
[redacted]	[redacted]	PN	082	M	12/30/85	01/08/86	01/21/86	485	

October 15, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Gentlemen:

This hospital has received and reviewed the mortality rate calculation recently sent to us by your organization. We are hospital No. 360194. We would draw your attention to patient [redacted] The patient was admitted on April 23, 1986 and was discharged through death on May 1, 1986. The diagnostic category was EY. The principle diagnostic code listed in the mortality report is 378.9. The principle code should be 578.9. The error was committed by an outside keypunching agency used by the hospital. Consequently the death should have been included under GI. This modification results in no deaths occurring to this hospital's ophthalmologic patients.

Sincerely yours,

John C. Imhoff
President

JCI/ap

cc: OHA - Attn: David Engler
Nancy Gillenwater, U.R. Coord.

GALION COMMUNITY HOSPITAL • PORTLAND WAY SOUTH • GALION, OHIO 44833 • (419) 468-4841

Good Samaritan Medical Center
Sponsored by the Franciscan Sisters of Christian Charity

October 22, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Health Standards & Quality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Good Samaritan Medical Center
# 360039

Dear Dr. Roper:

In reviewing the 1986 mortality statistical information which HCFA sent to Good Samaritan Medical Center, we have found the following error: (Specific patient names and details are attached.)

In your report three (3) patients were listed as having expired after they were dismissed from our facility. Our records indicate that they expired in the hospital, and that the dates of death do not match your statistics.

A fourth patient was listed as expiring in the hospital. Our records indicate the patient was transferred to a nursing home and expired while a patient there.

Copies of the face sheet, death procedure flow sheet, or transfer sheet are attached for each of the above listed patients.

Additionally, Peer Review Systems, Incorporated, the PRO for Ohio, informed us that they had prepared some mortality data for each hospital, and in preparation of this data they had identified two of our patients for whom the fiscal intermediary had incorrectly reported deaths or double reported deaths during the time period of 1986. Those two patients are as follows:

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

800 Forest Avenue, Zanesville, Ohio 43701 (614) 454-5000

One patient was listed as a "double" death expiring on 6/9/86 and 6/10/86. Our records show the patient did die on June 10, 1986.

The second patient was reported by the fiscal intermediary to have expired on 12/31/86. This patient was still alive as of July 8, 1987, which was the patient's last hospitalization at Good Samaritan from which she was discharged alive. The first patient was noted to be listed on your patient runs which HCFA submitted to Good Samaritan Medical Center. However the second patient was not listed. We are advising you of these two cases should we have overlooked these errors on your data because they have been reported to us by the PRO as possible errors.

We find ourselves unable to verify the calculations HCFA submitted to Good Samaritan Medical Center as our computer does not maintain statistical information in the same manner that you have submitted data to us. The discrepancy in our figures probably reflects multiple admission of individual medicare patients. Additionally, we are unable to verify the actual deaths of the twenty-nine patients which you indicated expired after discharge.

I do agree that quality of care does need to be monitored in all health care facilities. However, it would seem in everyone's best interest, especially our patients, that if comparative data is to be maintained and utilized, the mechanism for performing this is known by all concerned parties. In this manner the same data can be collected by both HCFA and the hospital. At the present, most large hospitals will be unable to verify the statistical information.

Furthermore, concurrent monitoring is the best method to perform quality assurance, to correct problems as they arise. Problems which may have been reflected in a hospital's 1986 data may already have been corrected. This hardly seems an effective and efficient method of review.

Finally, how are factors such as hospice facilities and cancer centers, which affect predicted mortality rates, incorporated into your statistical data?

Very truly yours,

Daniel J. Rissing
President

DJR:bs
enclosures

Patient Names and Details

[redacted] - It was listed that this patient expired on 12/31/86, which would have been after his dismissal. Our records indicate that [redacted] expired on 12/26/86.

[redacted] - HCFA records indicate that [redacted] expired on 12/31/86 after her discharge. Our records indicate that [redacted] expired on 12/17/86 while hospitalized.

[redacted] - HFCA records indicate that [redacted] expired on 12/31/86 after discharge. Our records indicate that [redacted] expired on 12/26/86 while hospitalized.

[redacted] - HCFA records indicate that [redacted] expired on 8/4/86. [redacted] did not expire on that date and was transferred to a nursing home on 8/4/86. She did expire while a patient in the nursing home on 8/6/86.

[redacted] - The PRO listed [redacted] as a double death expiring on 6/9/86 and 6/10/86. [redacted] did die on June 10, 1986.

Those Reported to Us by the PRO:

[redacted] - This patient was reported by the fiscal intermediary to have expired on 12/31/86. [redacted] was still alive as of July 8, 1987, which was her last hospitalization at Good Samaritan from which she was discharged alive. [redacted] was noted to be listed on your patient runs which HFCA submitted to Good Samaritan Medical Center. However, [redacted] was not listed. We are advising you of these two cases should we have overlooked these errors on your data because they have been reported to us by the PRO as possible errors.

GRACE
HOSPITAL
2307 WEST 14th STREET • CLEVELAND, OHIO 44113-3698 • (216) 687-1500

September 30, 1987

William L. Roper, M.D.
Administrator
Heath Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Medicare Provider # 360104

Dear Dr. Roper,

The following comments are hereby submitted to reflect an appropriate source of information.

We feel deaths, (noted below) after discharge, should not be included in Hospital death rate.

1. [redacted]
   A. Expired at home, four (4) days after discharge.
2. [redacted]
   A. Expired three (3) days after discharge at Nursing Home.
3. [redacted]
   A. Expired ten (10) days after discharge at home.
4. [redacted]
   A. Expired in Nursing Home within six (6) hours after discharge.
5. [redacted]
   A. Expired eleven (11) days after discharge at Nursing Home.
6. [redacted]
   A. Expired seven (7) days after discharge at Nursing Home.
7. [redacted]
   A. Expired one (1) day after discharge at Nursing Home.

These patients should **not** be included in the hospital mortality census and would therefore reduce the list to nineteen (19) expired patients. However, the following patients should be included in this report, that were omitted from your computer list.

1. [redacted] - Adm. 11/19/86
   A. Expired December 04, 1986 - Age 63 - DX: 482.8 (in hospital).
2. [redacted] - Adm 07/30/86
   A. Expired September 1, 1986 - Age 78 - DX: 799.1 (in hospital).

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The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

3. [redacted] - Adm. 08/01/86
   A. Expired August 15, 1986 - Age 79 - DX: 507.0 (in hospital).

The following patient was also omitted from your list. She died one (1) day after discharge from hospital, but should not be included in the Hospital death rate.

1. [redacted] - Adm. 03/05/86 - Disch. 04/08/86
   A. Expired in Nursing Home, April 9, 1986 - Age 86 - DX: 331.0

Conclusion

The patients that expired in the nursing homes or in areas other than the hospital should be excluded from this report.

Re-cap

Patients listed on report.	26
Less patients expired in other than hospital.	(7)
Patients that should be listed but not.	3
Total to be listed.	22

Also please make the following corrections to your data:

The expired patient - [redacted] - Date of Death January 27, 1986 (in hospital).

The expired patient - [redacted] - Age 85, not 83.

The expired patient - [redacted] - Age 86, not 91.

Most importantly, number of cases listed under "all causes" should be 441, not 218.

Sincerely,

Ed Baginski,
Administrator

HOSPITAL = 360104 GRACE HOSP CLEVELAND OH

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	218	12 %	7 TO 18 %
CA - CANCER	6	17 %	5 TO 69 %
CE - CEREBROVASCULAR ACCIDENTS	2	50 %	3 TO 91 %
GC - GASTROINTESTINAL CATASTROPHES	9	11 %	2 TO 53 %
GI - GASTROINTESTINAL DISEASE	39	5 %	1 TO 18 %
GU - UROLOGIC DISEASE	4	0 %	0 TO 78 %
GY - GYNECOLOGIC DISEASE	3	0 %	0 TO 100 %
HL - LOW-RISK HEART DISEASE	6	0 %	0 TO 76 %
HM - SEVERE CHRONIC HEART DISEASE	18	17 %	8 TO 47 %
HS - SEVERE ACUTE HEART DISEASE	1	0 %	1 TO 97 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	3	0 %	0 TO 84 %
OP - ORTHOPEDIC DISORDERS	6	0 %	0 TO 99 %
PN - PULMONARY DISEASE	45	27 %	11 TO 37 %
RN - RENAL DISEASE	5	20 %	2 TO 71 %
SE - SEPSIS	2	50 %	5 TO 98 %
TR - SEVERE TRAUMA	4	25 %	0 TO 81 %

GRANDVIEW
Hospital and Medical Center

Robert D. Berger, D.O.
Senior Vice President,
Medical Affairs

October 23, 1987

William L. Roper, M.D.
Department of Health and Human Services
Health Care Finance Administration
Washington, DC 20201

RE: Medicare Provider Number 360133

Dear Dr. Roper:

The data submitted by HCFA indicates that 225 patients expired at our facility within 30 days of admission, and virtually all of these cases were well within the range of predicted mortality. In fact, your data shows that our hospitals have a slightly lower than average mortality rate.

Nonetheless, there are some concerns with respect to use of mortality data as an indicator of quality. As you know, mortality is a factor influenced by many variables, not the least of them being severity of illness. The presence of co-morbidities helps to identify those patients whose treatment is affected by multiple disease processes, but still does not adequately define the degree of severity. Other equally important factors which should not be overlooked are the socioeconomic conditions of the patient and the support systems available to them during the post-hospitalization period, admission source and discharge destination, occupation, age, sex, race, and cause of death.

Above all one must realize that no two cases are exactly the same. Patients may experience the same outcome, in these data--death, however the course of each, even with the same or similar diagnoses, is not the same. To arrive at a decision of proper versus improper care or quality of care each case must be reviewed by another physician or group of physicians. Individual variations must be considered and weighed along with severity of illness, time factors and a host of entities that give an insight of what transpired. A post-mortem examination performed adequately will give a final appraisal of what transpired. The human factor cannot be eliminated in successful mortality review.

405 Grand Avenue
Dayton, Ohio 45405

Phone
(513) 226-3412

Member
American Osteopathic Hospital Association

Other issues, aside from medical and demographical patient data, complicate the statistical analysis of mortality data. For instance, the type of services provided by the hospital will affect patient mix and may serve as one predictor of survival rates. Take the example of a facility whose cardiac program attracts high risk patients in comparison to a smaller hospital whose services do not include the more complicated cardiac procedures. Hospital bed-size and tracking component are also factors along with the validity of documentation and coding in the medical record.

Finally, the inclusion in the data of patients expired within 30 days of admission but after discharge, is misleading because it does not take into account their prognosis, discharge destination or cause of death. Roughly, 50% of the expirations reported by HCFA were studied in detail by our facility in order to assess these factors. Fifty percent of the patients had a principal diagnoses of metastatic cancer with poor prognosis. Twenty-two percent were discharged to a nursing home, or home health agency. All of these patients were seriously ill and most had complicating histories and co-morbid diagnoses. At least two patients' discharge dates were erroneous and had been submitted for correction (see attachment).

In conclusion, we find that it is encouraging that HCFA is willing to examine and refine its analytic methods for reporting mortality rates based upon patient characteristic such as age and sex. However, we feel these factors are insufficient evidence, in and of themselves, to make judgments regarding the quality of care of an individual institution.

Sincerely,

Robert D. Berger, D.O.

Robert D. Berger, D.O.
Senior Vice President
Medical Affairs

RDB:jb

Attachment

ATTACHMENT

Please correct expiration dates for the following patients:

Patient Name	Expiration Date	Patient Identifier
[redacted]	11-15-86	[redacted]
[redacted]	10-15-86	[redacted]

Grant medical center

October 28, 1987

Mr. Harvey Brook
Health Standard & Quality Bureau
2 D 2 Meadows East Building
6300 Security Boulevard
Baltimore, Maryland 21207

Dear Mr. Brook:

Thank you for allowing us the opportunity of responding to information intended for your December publication on Medicare Patient Mortality. We understand your intentions and agree that in some cases additional comments intended to help clarify the figures and qualifications related to each diagnostic category can be extremely helpful to its interpretation by other hospitals and more importantly the general public. The following general comments are therefore submitted for review and publication.

1) The title Severe Acute Heart Disease as defined by the Diagnostic Related Groups according to your information may be misleading to the public. In the cases identified specific to our institution, such DRG's as ruptured abdominal aneurysm, ruptured thoracic aneurysm and ruptured aortic aneurysm of unspecified site were included. The public perception of acute heart disease is more than likely different. Additionally, it is important to note that the patients with ruptured aneurysms identified in your study arrived at our institution status post rupture. That, along with their age and other contributing findings substantiate a mortality rate of less than 50% by national standards.

2) After a complete review of each patient chart included in your study it is our determination that the stated mortality rates are assuredly biased by the statewide reputation of our institution as a Trauma Center supported by a two helicopter system which transports to Grant severe trauma and cardiac patients from other institutions presently at this time incapable of treating this type of acute admission. Consequently, the cardiac patients seen at Grant are outside the normal range traditionally associated with a community hospital. This can be substantiated by the fact that of the medical patients in your report, 25% were emergently transported to Grant from another institution and another 50% reached our institution by emergency transport with an initial prognosis associated with high cardiac mortality rates.

3) Although as stated above, our institution receives an inordinate amount of critical cardiovascular patients. We also provide our community the services of Cardiac Diagnostic and Surgical Programs which have mortality rates impressively within the nationally accepted norms as indicated by the following statistical data:

1986

PROCEDURE	VOLUME	MORTALITY	%
Elective Revascularization	209	5	2.4%
Elective Valves	23	3	13%
Elective Combinations	21	2	10%
Elective Other	4	0	0%
Emergencies	54	6	11%
TOTAL	311	16	5%

1987 YTD (10-1-87)

PROCEDURE	VOLUME	MORTALITY	%
Elective Revascularization	198	3	1.5%
Elective Valves	21	0	0%
Elective Combinations	13	0	0%
Elective Other	5	0	0%
Emergencies	50	8	16%
TOTAL	287	11	3.8%

We hope that the above information and comments will provide for a more accurate interpretation of the stated mortality rates. The Administration and Medical Staff will look forward to an even more indepth review of these and all other Medicare patients whenever the need exists or is mandated.

Thank you for your attention.

Sincerely,

Thomas Williams M.D.
Thomas E. Williams, Jr., M.D.
Director, Open Heart Surgery
Grant Medical Center

Frank V. Swinehart
President
Grant Medical Center

Stephen Kirschner, M.D. FACC
Stephen Kirschner, M.D.
Director, Cardiac Cath Lab
Grant Medical Center

Larry C. Carey M.D.
Larry C. Carey, M.D.
Director, Medical Affairs
Grant Medical Center

Bhagwan Satiani, M.D.
Program Director, Vascular Lab
Grant Medical Center

DJS/ds

Mediare Provider #360017

Grant medical center

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

We at the Grant Medical Center LifeFlight Trauma Services have maintained a strong commitment to Trauma care for over five years. This is evidenced by a variety of patient care, education and research activities. Because of our strong stance, we have become the defacto Trauma Center for Central Ohio, receiving the largest percentage of seriously injured patients in the region. Despite this fact in over 1205 Trauma admissions admitted to Grant Medical Center from January, 1986 to June, 1987, we had a crude mortality of 10.0%. Eliminating those patients that presented dead on arrival decreases this mortality to 6.5%; a very reasonable figure for an urban Trauma Center with a rural population base.

HCFA reviewed 67 of our Medicare patients they felt qualified as severe trauma. Ten of these patients died for a mortality of 15%. Three of these patients had isolated broken hips which we do not manage on our Trauma Service. The remaining seven patients averaged 80 years old with a Trauma Score (index of physiologic derangement) of 9 and an Injury Severity Score (index of anatomic derangement) of 32. Using standard TRISS Methodology* these patients had a probability of survival of less than 25%. Coupled with the fact that 6 out of 7 of these patients' families declined further therapy after initial resuscitation makes their mortality predictable.

We at Grant Medical Center LifeFlight Trauma Services feel our efforts are second to none and we would be glad to discuss this during an open forum. Although we applaud HCFA's interest in Quality Assurance, we feel a more scientific methodology would provide data which is more useful and relevant.

Robert Falcone, M.D., F.A.C.S.
Medical Director
Regional Trauma of Central Ohio
at Grant Medical Center

Frank V. Swinehart
President
Grant Medical Center

Larry C. Carey

Larry C. Carey, M.D.
Director, Medical Affairs
Grant Medical Center

RF/dks

* Boyd, C.R., Tolson, M.A., Copes, W.S., : Evaluating Trauma Care: TRISS Methodology J. Trauma, 27: 370, 1987

Medicare Provider #360017

111 South Grant Avenue, Columbus, Ohio 43215 • (614) 461-3232

COMMENTS ON THE HCFA MORTALITY DATA

GREENE MEMORIAL HOSPITAL, XENIA, OHIO

INTERPRETATIVE REMARKS

In all of the diagnostic catagories, Greene Memorial Hospital's actual mortality rate falls within the range of the predicted mortality rate. Additionally, the average age at the time of death of these Medicare patients was 79 years of age. Age was not a factor taken into consideration in the HCFA Mortality Report. According to the American Hospital Association, in a bulletin to hospitals dated September, 1987, from Carol M. McCarthy,PhD JD

> "The statistical model developed by HCFA measures the relationship between a limited number of patient characteristics and the risk of death. At best, the model offers crude estimates of the expected risk of death. ....In interpreting the data, you should keep two things in mind. First, the reliability of the model is unknown, but appears to be quite limited......... The model fails to consider a wide range of factors with a significant impact on mortality. Examples include, but are not limited to, the patient's general health status, the stage of the patient's illness, the patient's psychological condition, and family support....... The second, and more serious, limitation of the model is that it has not been validated......... The data to be released by HCFA raise important questions that they cannot answer............. The HCFA data are not, in themselves measures of hospital performance. At best, they can be used to better focus quality assurance activities. Under no circumstances should they be used as the basis for judging the quality of care provided by different hospitals."

The AHA bulletin goes on to say that the HCFA does not include information from the patient's medical record in regards to whether; 1. the death was the expected outcome at the time the patient was admitted or discharged, 2. the death was a significant possibility, i.e. the patient was under treatment for a chronic condition or had sustained massive trauma, 3. the deaths can plausibily attributed to factors not considered in the HCFA model for example: age of the patient or complications.

DATA VERIFICATION

The data used by HCFA indicate that a total of 153 Medicare patients admitted to Greene Memorial Hospital died within thirty days of admission. Of these, 115 died while still a patient of the hospital, while 38 died after discharge. Our own records indicate that 1,045 Medicare admissions occurred in 1986. We have no way of verifying whether the number of Medicare Patients which died after discharge is correct, since information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis.

GUERNSEY MEMORIAL HOSPITAL
1341 NORTH CLARK ST.
P. O. BOX 610
CAMBRIDGE. OHIO 43725-9990

H. DALE GOTSCHALL. PRESIDENT

PHONE 439.3561

October 26, 1987

Dear Dr. Roper:

In analyzing our 1986 Medicare mortality information, we would want you to be aware of errors discovered as you requested:

1) patient ID [redacted] date of admission 11/25/86, date of discharge 11/25/86, date of death 12/21/86;

   patient was transferred to Camden Hospital, West Virginia from our institution;

2) patient I [redacted] date of admission 7/12/86, date of death 7/24/86;

   actual date of death was 7/23/86 and was billed that way.

Our analysis also revealed 26 deaths outside of our hospital, 12 of these at a nursing home. Also, that our average age at death was 78.8.

Sincerely,

Paula Shockley

Paula Shockley, R.N.
Director of Quality Assurance

Medicare provider # 36-0203

MAGRUDER MEMORIAL HOSPITAL
615 FULTON STREET
PORT CLINTON, OHIO 43452
419-734-3131

ROBERT P. DUMMINGER
ADMINISTRATOR

October 26, 1987

MAGRUDER HOSPITAL
MEDICARE PROVIDER # 36-0114
MORTALITY DATA COMMENTARY

Cancer (CA Group)

Internal hospital data indicates there were 56 cases in this group with 5 patient deaths* for a 9% mortality rate.

* One of the deaths attributed to cancer in the initial mortality report was really the result of heart disease. It has been added into our revised numbers for the HS Group which appear later in these comments.

All 5 patients who expired were in the terminal stages of their cancer at time of admission.

Cerebrovascular Accidents (CE Group)

Internal hospital data indicates there were 27 cases in this group with 6 patient deaths for a 22% mortality rate. Of the 6 deaths, 4 patients were near death (moribund) at time of admission. These 4 patients, ages 98, 94, 79 and 77 were admitted with massive damage due to their stroke. The other 2 patients who died were 89 and 84 respectively and had such accompanying diagnoses as congestive heart failure, osteoporosis (bone decalcification), chronic irregular heartbeat and aortic stenosis.

Gastrointestinal Catastrophes (GC Group)

Internal hospital data indicates there were 15 cases in this group with 1 patient death for a 7% mortality rate. The one patient in this group who expired (age 74) was admitted with a very poor prognosis due to severe emphysema and anemia.

Gastrointestinal Disease (GI Group)

Internal hospital data indicates there were 122 cases in this group with 4 patient deaths for a 3% mortality rate. Of the 4 patients who died, 1 expired within 10 hours of admission. This patient, age 76, had no audible blood pressure at time of admission and was experiencing cardiovascular collapse. This patient also suffered from diabetes. A second of these patients, age 67, died within 48 hours of admission. This patient also suffered from cancer and refused surgery for a perforated bowel.

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MAGRUDER HOSPITAL
MEDICARE PROVIDER # 36-0114
MORTALITY DATA COMMENTARY
Page 2

Urologic Disease (GU Group)

Internal hospital data indicates there were 44 cases in this group with 2 patient deaths for a 5% mortality rate. Of the 44 patients who were admitted in this group, 2 patients, ages 85 and 80, expired after discharge. Both of these patients also suffered from emphysema, and severe hardening of the arteries of the brain.

Low-Risk Heart Disease(HL Group)

Internal hospital data indicates there were 119 cases in this group with 2 patient deaths for a 2% mortality rate. No additional comments.

Severe Chronic Heart Disease (HM Group)

Internal hospital data indicates there were 50 cases in this group with 5 patient deaths for a 10% mortality rate. The ages of the patients who expired were 88, 88, 86, 85 and 81. In addition, one of the 5 patients expired on the day of admission and a second expired within 24 hours of admission.

Severe Acute Heart Disease (HS Group)

Internal hospital data indicates there were 42 cases in this group with 15 deaths for a 36% mortality rate. Of the 15 patients in this category who died, 7 had such massive heart attacks that, despite aggressive medical treatment, they expired within 24 hours of their admission. Two other patients expired within 48 hours of admission.

Metabolic/Electrolyte Disturbances (ME Group)

Internal hospital data indicates there were 7 cases in this group with 1 death for a 14% mortality rate. The one patient who expired was 81 years old and also suffered from Parkinson's disease. This patient was in insulin shock at the time of admission.

Pulmonary Disease (PN Group)

Internal hospital data indicates there were 90 cases in this group with 10 deaths for a 11% mortality rate. Of the 10 patients in this group who died, 4 expired within 24 hours of admission. These 4 patients were ages 86, 85, 81 and 78 and had such other complications as emphysema, congestive heart failure, diabetes and cancer of the prostrate.

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ROBERT P. DUMMINGER
ADMINISTRATOR

Of the other 6 patients who expired, 3 patients had emphysema, 2 had diabetes, 2 had coronary artery disease, and such other complications as kidney failure, cancer, heart attack, alzheimer's disease, and congestive heart failure were also present. Of these 6 patients, 3 were over age 85 (89, 89 and 88).

Sepsis (SE Group)

Internal hospital data indicates there were 8 cases in this group with 5 deaths for a 63% mortality rate. Of the 5 deaths, one patient, age 87, was near death (moribund) at time of admission. This patient also suffered from severe congestive heart failure, chronic coronary artery disease, and emphysema. A second patient, age 83, was admitted with a very poor prognosis due to multiple problems including cirrhosis of the liver, kidney failure, severe vascular disease and congestive heart failure. A third patient, age 74, also was admitted with a poor prognosis due to the advancement of the infection plus accompanying diabetes. The other 2 patients in this group who died were ages 89 and 81 respectively and had accompanying diagnoses of penumonia, a severe blood disease, and debilitating alzheimer's disease.

All Causes

Internal hospital data indicates there were a total of 1055 Medicare cases at Magruder Hospital with 71 deaths for a mortality rate of 7%.

HARDIN
MEMORIAL
HOSPITAL
921 East Franklin Street
Kenton, Ohio 43326
(419) 673-0761

LaMar L. Wyse
President

October 26, 1987

William L. Roper, M.D., Administator
Health Care Financing Administration
P.O. 26684
Baltimore, Md. 21207

Dear Dr. Roper:

Thank you for giving us the opportunity to respond to the mortality data being released by HCFA for 356 Medicare patients treated in Hardin Memorial Hospital during 1986. Our own records indicate that there was a total of 735 Medicare admissions to Hardin Memorial Hospital during 1986. This deiscrepancy reflects multiple admissions of individual beneficiaries. The data used by HCFA indicate that a total of 53 Medicare patients admitted to Hardin Memorial Hospital died within 30 days of admission. Of these, 44 died while still a patient in the hospital, while 9 died after discharge. We found no discrepancies in the data for age, sex, date of admission, date of discharge, and date of death. There were slight differences in our diagnostic categories, probably due to coding differences. Without detailed information concerning the billing data available to HCFA, it is impossible to verify the accuracy of the coding used in your analysis.

All deaths occuring during a stay at Hardin Memorial Hospital are reviewed through our quality assurance mechanisms. While the data does not show any trends which raise particular concern, we are still using it as a mechanism to assist us in peer review.

The hospital's actual mortality rate falls well within or below the range of the predicted mortality rate in all of the categories. While we found no errors in the calculation of the mortality rates, we feel there are many factors influencing risk of death which were not taken into account. The reliability of the statistical model is unknown and its validity has not been determined.

In 1986, 38% of our total admissions were Medicare patients. There are no skilled nursing facilities in Hardin County. Therefore, many patients who develop problems in the nursing homes are admitted to the hospital. 42% of the Medicare deaths were patients admitted from area nursing homes. 76% of the persons listed in your data had complicating and/or comorbid conditions according to our review. Additionally, and quite significantly, 32 of the 53 patient records (60%) indicated a request that resuscitative measures not be initiated on those patients.

Again, while your data and our review do not reveal areas of particular concern, we will continue to monitor mortality data as one aspect of our quality review activities. We use mortality data pricipally as identification of areas for peer review and educational programing. Beyond that, we feel that it is not appropriate as an indicator for comparative statistics and should not be used as the sole or principal indicator of quality among physicians and/or hospitals unless the statistical methods can be improved and multiple variables can be quantified.

Thank you again for the opportunity to review and comment on the data. We hope our comments have been responsive and informative.

Sincerely,

LaMar Wyse

LaMar L. Wyse
President

LLW/ss

HOLZER MEDICAL CENTER 385 JACKSON PIKE, GALLIPOLIS, OHIO 45631

CHARLES I. ADKINS, JR.
CHIEF EXECUTIVE OFFICER
(614) 446-5000

October 21, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

RE: Comments on HCFA Mortality Data
Holzer Medical Center, Gallipolis, Ohio
Provider #360054

Dear Dr. Roper:

By way of introduction and in response to HCFA Mortality Data, permit me to indicate that Holzer Medical Center is a 269 bed Rural Referral Center located in southeastern Ohio that services a diverse rural population from a seven county area (five counties in southeastern Ohio and two counties in West Virginia). Holzer Medical Center's current Case Mix Index exceeds 1.17 and a unique characteristic of the Hospital is our multi-specialty 72 member Medical Staff, all of whom are either Board Certified or eligible. In many aspects of medical care, Holzer Medical Center considers itself a sole community provider. In this regard, a Regional Cancer Center along with a Linear Accelerator has been established. With this basic introduction, Holzer Medical Center's comments on the HCFA Mortality Data follows:

Data Verification

The data used by HCFA indicate that a total of 174 out of 1362 Medicare patients admitted to Holzer Medical Center died within 30 days of admission during the year of 1986. Of these, 141 died while still a patient in the hospital while 33 died after being discharged. Our records indicate that 3089 Medicare admissions occurred in 1986. It should be noted that the data used by HCFA in establishing mortality rates reflect only the last admission for all Medicare beneficiaries in 1986 rather than all Medicare admissions for the year. In addition, patients staying longer than 30 days were excluded from the computation. HCFA has based Holzer Medical Center's mortality rate upon the 1362 patients or 44% of the 3089 admissions which inflates the mortality rate by

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

7% and results in a total mortality rate of 13%, whereas our actual mortality rate is 5.6% of Medicare admissions.

Interpretive Remarks

HCFA mortality data has grouped Medicare admissions into 17 diagnostic categories. The patients are grouped based upon the diagnosis responsible for the admission (principal diagnosis) rather than the actual cause of death. It is possible that patients expire due to conditions not directly related to their principal diagnosis and the HCFA mortality data does not address this in the diagnostic categories identified.

Holzer Medical Center did not exceed any upper limit for any predicted mortality range for the 17 diagnostic categories. Based upon our review, 90% of patient deaths fell into categories classified as high risk or unknown leaving only 10% in the low risk category. In addition, 100% of the patients falling into the low risk category were found to have recognized complications and/or comorbid conditions which contributed to the overall patient's condition.

Results of Medical Record Review

Five errors were identified in the HCFA listing of deaths which resulted in one patient being categorized as a low risk orthopedic (OP) death but should have been classified as a high risk severe acute heart disease (HS). Three cases consisted of wrong dates of death and one case proved not to be the actual last admission of 1986. All of the above errors were verified to be true errors on the part of HCFA and not Holzer Medical Center (errors identified on the attached listing).

HCFA mortality statistics were based upon data resulting from admission dates rather than discharge dates which in itself is in conflict with the methodology used to generate the Medicare Cost Report as well as other intermediary transactions. More meaningful data could have been gathered if only the deaths which occurred while the patient was in the hospital were reported. It is unrealistic to contribute deaths to a hospital's mortality rate for those patients who expire after discharge. A variety of factors obviously can contribute to the beneficiaries' demise after being discharged, including but not limited to environmental, traumatic or socioeconomic influences as well as other health care rendered outside of our institution.

Sincerely,

Charles I. Adkins Jr.

Charles I. Adkins, Jr.

CIA/pa

cc: Ohio Hospital Association

HURON HOSPITAL SPECIFIC MORTALITY DATA

NOVEMBER, 1987

Thank you for the opportunity to respond to the mortality report which is intended for public release in December, 1987.

Release of this data in its current form as an indicator of quality of patient care is inappropriate. Missing in your model is a severity of illness index, as well as other variables, which have a direct impact on mortality and are vital to understanding the total mortality picture for each case.

The absence of a severity of illness index, as well as other variables, severely compromises the validity of the data as an indicator of quality of care in hospitals. As presented in the report, Huron Hospital is 3% above the predicted acceptable range for pulmonary cases. If a severity of illness index had been applied to Huron Hospital data, our pulmonary case mortality rate would have fallen well within the predicted range.

We reviewed each pulmonary case and found evidence where several variables not addressed in the HCFA model had a direct impact on mortality rate. If the data is to be used as an indicator of quality of care, these variables must be factored into the model. Variables currently absent from the HCFA model which have a direct impact on mortality are: patient origin, additional organ failure, relationship of principal diagnosis to actual cause of death, socioeconomic issues, patient support systems, condition on admission to the hospital and many others.

Our review of the pulmonary medical records revealed:

- a median age of 81.1 years
- 97% of the patients had additional organ failure exclusive of the pulmonary system
- 57% of the patients were transferred from a nursing home
- 62% of the patients had reached a state of debilitation resulting in the family requesting that aggressive therapy be withheld

The fact that over one half of the pulmonary patients were transfers from nursing homes signifies that the patients were in a much weakened state of health upon arrival to Huron Hospital. Additionally, in view of the advanced age of the patients, the number of body systems involved, the deteriorating condition, and the absence of aggressive therapy, the HCFA data does not reflect an aberrant mortality rate.

Our hospital Quality Assurance Committees routinely review all hospital deaths. All committee reports show that mortality cases have met quality screens and indicators, and that quality of care was not a factor in the death. This reinforces our assertion that the data you intend to publish is only reliable in predicting mortality and not quality of patient care.

In summary, the data shows Huron Hospital to be within the expected range for all categories but pulmonary disease. The presence of an increase of 3% in the pulmonary category is not indicative of a quality of care problem, as shown above.

Our Mortality Review Committees, in conjunction with our Quality Assurance Committees, perform 100% review of hospital deaths. To date, the reviews assure us that quality of care is not compromised and does not contribute to our mortality rate.

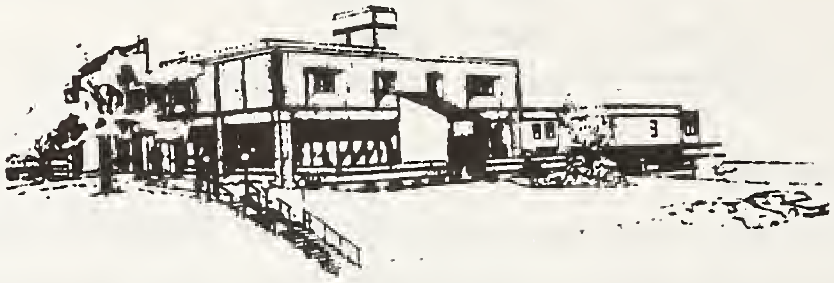
Re-review of the pulmonary deaths revealed many factors contributing to mortality that are not addressed in the HCFA model. These same factors, as well as others, must be included in any study attempting to relate quality of care to mortality rates.

Huron Hospital has always been and will continue to be committed to enhancing the quality of life, and preserving and restoring the health of the populations we serve. To that end, we have systems in place to review mortality and morbidity and a quality assurance check and balance system to assure that our patients receive the highest quality of care possible. We always review the TOTAL patient, which includes addressing severity of illness and other above mentioned variables.

In view of the absence of a severity of illness index and other variables in the HCFA data, we strongly protest any statements equating quality of patient care with these specific mortality statistics.

Wende Miller, Director of Operations
10/27/87

Joel Pomerene Memorial Hospital
500 WOOSTER ROAD • MILLERSBURG, OHIO 44654
216-674-1015



TO: HCFA

FROM: Administrator, Pomerene Hospital

DATE: October 26, 1987

SUBJECT: **MORTALITY RATES FOR POMERENE HOSPITAL (MEDICARE PROVIDER NUMBER 360148)**

We have reviewed the mortality figures and methodology submitted to us.

We have the following problems and concerns with the data and methodology used by HCFA:

1) HCFA used only 51% of the total Medicare admissions for the period. We do not have available to us the total death rate for the other 49%, but we do know the in-hospital death rate was lower.

2) How can we be held accountable for all deaths occurring within 30 days after discharge? Deaths may occur during this 30-day period which are completely unrelated to the condition for which the patient was treated: auto accident deaths, heart attacks, etc.

3) The data does not take into consideration severity of illness, advanced age, certain co-morbidities, and emergency surgery.

4) We have an unusually high number of nursing home beds in our primary service area which leads to the admission of more acutely ill and older patients. We will tend to have a higher mortality rate because of this.

5) It is unclear to us why HCFA has gone to such costly efforts to publish this mortality data. HCFA claims the statistical model used is not to suggest that quality problems are probable and that the data are not "measures of hospital performance and are not to be used by consumers to judge hospital quality." Given these claims, what is the purpose of this data?

6) Pomerene Hospital has for years performed monthly peer reviews of all deaths. Such reviews are important and have proven to be of significant educational value.

WDF/cs

KAISER PERMANENTE SM

October 27, 1987

William Roper, M.D.
HCFA Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
6300 Security Blvd.
Room 2-D2
Meadows East Building
Baltimore, Maryland 21207

Dear Dr. Roper:

This letter is in response to your correspondence of September 21, 1987 regarding the Health Care Financing Administration mortality information for two Kaiser Foundation Hospitals which are located in the greater Cleveland, Ohio area.

Kaiser Foundation Hospital, Cleveland (Medicare No. 360345) was reviewed and all of the data included in your transmittal was correct. The list for the Cleveland hospital contained only 12 names. Cleveland hospital moved their inpatient services to another community hospital during the second quarter of 1986. On the list of 12 patients, 4 were discharged alive. 3 of the patients were discharged home and 1 was discharged to an extended care facility.

Kaiser Foundation Hospital, Parma (Medicare No. 360232) was a list of 103 names. 3 of the patients had incorrect dates of death upon checking the data submitted. They are as follows:

ID #	Surname	HCFA Date of Death	KFH, Parma Date of Death
[redacted]	[redacted]	02/02/86	02/01/86
[redacted]	[redacted]	04/03/86	04/02/86
[redacted]	[redacted]	06/30/86	06/29/86

28 patients were discharged alive; 18 to extended care facilities, 7 were discharged home and 3 were discharged home with Home Health Care.

The Corporate Offices of Kaiser Foundation Hospitals has reviewed the HCFA Medicare mortality statistics and suggest that you read the attachment (dated October 26, 1987) from Mark S. Blumberg, M.D.

Administrative Offices
1100 Bond Court Building • Cleveland, OH 44114 • 621-5600

Certainly the problem related to lack of hospice programs is of paramount concern in the greater Cleveland area.

I hope the analysis and attachment contributes to your publication and the quality of the data submitted. We appreciate having an opportunity to review this information.

Sincerely,

Barbara J. Robertson, R.N., Ph.D.
Director, Hospitals & Health Centers
and Associate Regional Manager

BJR/ks
Attachment

October 26, 1987

KAISER FOUNDATION HOSPITALS' STATEMENT
REGARDING
HCFA MEDICARE MORTALITY STATISTICS RELEASED 1987

As a group, the 28 Kaiser Foundation Hospitals (KFH), located in four states, had 39 mortality rates which were below the tolerance ranges predicted by HCFA while only 4 rates were above these predicted ranges. HCFA reported up to 17 mortality rates for each hospital, and the range for each was intended to include 95% of all hospitals. Thus by chance alone, 12 of the KFH mortality rates would be expected to be higher than HCFA's predicted ranges, with another 12 lower than these ranges.

This favorable 39 to 4 ratio of mortality statistics for KFH hospitals needs little or no explanation. Nevertheless we are concerned by HCFA's use of risk models which cannot be critically evaluated at this time. Unaccountably, HCFA has not released sufficient data for an objective outside review of their method (e.g., no coefficients of variables in the models, no expected death rates). Despite this limitation, our preliminary review of the mortality risk adjustment models for 1986 Medicare discharges indicates serious problems which greatly reduce their value as useful measures of hospital care. One of the most apparent problems is due to the fact that nearly all the 16 disease categories contain principal diagnoses which differ greatly in their mortality rates. The 8 chronic comorbidities used as the key risk adjustors are not adequate to overcome these large differences. For this reason, hospitals can vary considerably in their risks, even after applying the models' adjustments. Some illustrations of omitted risk factors follow.

CA - Cancer care cannot be judged from a single hospital episode, particularly when there are no risk factors to measure either the stage of the disease or whether the case was admitted for scheduled surgery. Admission for terminal care is certainly a key risk factor for cancer deaths, and this in turn depends on the availability of alternate sources of such care, for example hospice and home care programs. While admissions to HCFA-certified hospices were excluded from the 1986 discharge data, we believe that admissions to hospice units in short-term hospitals which had not sought HCFA approval were generally included, even when no charge for this care was made to HCFA. This would lead to inclusion of hospice cases at some hospitals and not at others.

GI - Gastrointestinal disease includes the principal diagnosis of inguinal hernia (code 550). Most cases with this diagnosis are admitted for scheduled hernia repair surgery, which is very low in risk. However, some hernia cases are emergency admissions which are much higher in risk (e.g., strangulated hernias).

HS - Severe acute heart disease is likely to be dominated by acute myocardial infarction, which is generally much lower in risk than other cases in this category (e.g., ruptured aortic aneurysm, cardiac arrest).

TR - Severe trauma risk depends largely on the type, extent and combinations of injuries, none of which is distinguished by the risk model.

The Kaiser Permanente Medical Care Program has a long record of interest and involvement in the development and use of methods to adequately risk adjust outcomes of hospital care for patients with diverse risks at admission. This year's HCFA analysis has incorporated many improvements which we suggested in our published critique of the HCFA outliers data released last year. We will continue to cooperate with HCFA and other responsible agencies in efforts to further improve these methods to make the findings more useful.

Mark S. Blumberg, M.D.

2116C/29

KETTERING MEDICAL CENTER
3535 Southern Boulevard Kettering, Ohio 45429-1298 513 298-4331

KETTERING MEMORIAL HOSPITAL RESPONSE TO PROPOSED PUBLICATION OF HCFA 1986 MORTALITY DATA

Kettering Memorial Hospital Medicare Provider Number 36-0079

Kettering Memorial Hospital mortality rates were within the predicted range in all 17 categories, however, hospital management wishes to comment on three things:

1. Errors in the data
2. Shortcomings in the methodology
3. Caution to readers

Errors in the Data

Medical Records show that 1 patient listed as having died on the day of discharge (the usual indication of a hospital death) was actually discharged alive. The HCFA data for that patient is attached.

Of even more importance, but more difficult to track down, are data on the Severe Acute Heart Disease cateogory. HCFA found 128 medicare cases at Kettering Memorial Hospital in that category, but our records show 206 such cases. We found 6 cases out of the 206 were previous admissions in the year, leaving 200 cases. This differs so sharply from HCFA's 128 cases that we believe a large number of live discharges have been omitted. When these are included, the mortality rate should drop substantially in this category.

This one category illustrates the probability of errors in other categories that are difficult or impossible for the hospital to find on short notice.

Shortcomings in the Methodology

HCFA has attempted to adjust predicted mortality rates at individual hospitals depending on patients' age, sex, comorbid conditions, etc. No attempt was made to measure severity of illness, so the predicted figures are less "customized" than they appear. As a result perverse "rewards" can take place. A community with a good emergency squad response system will resuscitate more cardiac arrest patients than a comparable less well organized community. The hospital in the well organized community will receive on average a higher risk group of heart patients. It appears that this along with Kettering Memorial Hospital's reputation as a heart center has attracted a group of severe acute heart patients that are higher risk than usual.

HCFA's decision to include out of hospital deaths within 30 days of the last hospital admission brings confusion to the interpretation of these mortality statistics. For example, HCFA indicates that Kettering Memorial

Hospital had a death from eye surgery resulting in a 1% mortality rate. It turns out the patient was discharged in mid December after uneventful surgery. In early January the patient went into cardiogenic shock and was taken to a hospital not affiliated with Kettering Hospital, where she died a few days later. This means she will appear again in the 1987 HCFA release under a heart diagnosis! For HCFA to imply that this patient died from eye surgery at Kettering Memorial Hospital is a major disservice. This is just one example of a major shortcoming of this report.

Particularly in the severe acute heart category Kettering Memorial Hospital believes the public is being misled by the methodology. Included in this category were ruptured abdominal aneurysms. Ruptured abdominal aneurysms have nothing to do with heart care, yet those deaths raised the reported "heart" mortality rate at Kettering Memorial Hospital, unnecessarily increasing apprehension of real heart patients who may have read the HCFA report.

Caution to Readers

Newspapers are expected to publicize these mortality statistics. Headlines may imply that the printed mortality rates for each hospital apply to that hospital's entire patient population. Do not be misled in this regard. These figures apply only to a specialized high risk medicare population.

Just one example should illustrate this well. In the Kettering Memorial Hospital severe acute heart patient group, 71% of those who died were age 70 or over. Reviews of the charts so far show these patients were very ill at the time of admission often with multiple life threatening complications. A 48 year old man with chest pain coming to Kettering Hospital's emergency department by ambulance should be assured that his chances of survival are far higher than those of the typical severe acute heart patient in this HCFA report.

KETTERING MEMORIAL HOSPITAL MEDICARE PROVIDER NUMBER 36-0079

Patient ID Number	Surname (First 6 Letters)	Diagnostic Category	Age	Sex	Date of Admission	Date of Discharge Alive	HCFA Reported Date of Death
[redacted]	[redacted]	CE	066	M	01/20/86	01/25/86	01/25/86

36000 EUCLID AVENUE
WILLOUGHBY, OHIO 44094
(216) 953-9600

LAKE
WEST
HOSPITAL

LAKE
HOSPITAL
SYSTEM, INC.

LAKE
EAST
HOSPITAL

WASHINGTON AT LIBERTY
PAINESVILLE, OHIO 44077
(216) 354-2400 CORPORATE OFFICE

October 20, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Thank you for affording our hospital the opportunity to comment on the Medicare mortality data for 1986. We are a 360-bed general, voluntary, not-for-profit two-hospital system with a strong commitment to providing high quality care to the residents of Lake County and its surrounding area. We at Lake Hospitals are gratified that our mortality rates were well within the predicted ranges in all categories listed, especially since we have extensive programs in cardiology, neurosurgery and hospice. This data and mortality review in general, can be a useful tool in quality assurance activities and is one component of our Quality Assurance Program here. However, it is important that those using this data understand that a meaningful assessment of hospital performance is dependent on many variables and requires the analysis of many quality indicators, of which mortality is but one. In our hospital-wide Quality Assurance Program, there are literally scores of quality indicators monitored continually in this effort.

More specific comments on this data are as follows:

1. The HCFA Analysis rests on the assumption that patients admitted to all hospitals are similar except with respect to the characteristics included in the model (age, sex, diagnosis, complications, procedures). Considering the extensive research performed showing the lack of homogeneity of patients within the DRG's used in the Medicare Prospective Payment System, I question the validity of this assumption.

Continued. . .

2. Since there is no disease severity component within each disease category, the use of this data in comparing hospitals performance is highly speculative.

3. It is difficult, if not impossible to verify the data since we could not confirm the post-discharge deaths from our hospital records. These cases accounted for more than 37% of the deaths. Also, since you included only the first six letters of the last name on the patient listing, it was difficult to identify the proper patients. In the future, complete first and last names would be appreciated.

Should you have any questions concerning these comments, please do not hesitate to call.

Yours truly,

Thomas V. Thompson

Thomas V. Thompson, RRA, Director
Medical Records and Quality Assurance

TVT/lmg

LAKEWOOD HOSPITAL
Your life is our life's work.

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Data
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Please be advised that on Friday, October 23, 1987, we forwarded to you Lakewood Hospital's Response to HCFA's 1986 Medicare Mortality Report. On October 27, 1987 we sent by Federal Express the same document to the following address: 6325 Security Boulevard, Baltimore, Maryland 21207.

We have determined that our initial response contained an error and have so noted that error on the document enclosed. A corrected document is enclosed and we request that such be the official document submitted by Lakewood Hospital.

Very truly yours,

Fred M. DeGrandis
Vice President/Legal Counsel

FMD:gb
Enclosures

14519 Detroit Avenue • Lakewood, Ohio 44107 • 521-4200

REVISED DOCUMENT
(MAILED 10/28/87)

LAKEWOOD HOSPITAL'S RESPONSE TO HCFA 1986 MEDICARE MORTALITY REPORT

Lakewood Hospital supports the concept that patients and their family members should make decisions regarding their health care based upon accurate valid information. The Hospital appreciates the opportunity to comment on the HCFA 1986 Medicare Mortality Report and suggests strong consideration be given to the inclusion of a severity of illness methodology and weighted cognizance of the presence of significant underlying illnesses in improving the validity of subsequent reports.

The 1985 Health Care Financing Administration (HCFA) Medicare Mortality Report contained data which was not adjusted for factors that reasonably could account for differences in mortality from institution to institution. The question of quality of care provided by many hospitals was incorrectly raised. In the 1986 Report, HCFA has attempted to improve the significance of the information reported. However, the data provided and the methodology utilized in its preparation, in the words of William L. Roper, M.D., HCFA Administrator, "--is not a complete measure of the quality of care in an individual hospital. Until we have developed additional statistical measures to deal with complex illnesses, such as severity of illness, we cannot and do not recommend the use of the information by itself to make judgements about the quality of care of an individual hospital."

Mortality data alone do not serve as indicators of "high quality" or "low quality" care. Mortality rates may be higher or lower than predicted because the patients treated at a given hospital differ from those treated at the "average" hospital. The services offered at a given hospital and services available or not available in the community may differ from the "average" hospital.

HCFA has determined the Predicted Mortality Rates by considering specific conditions such as age, sex, previous hospitalization in the same calendar year and the existence of certain other medical conditions. The method fails to include previous hospitalizations in 1985 for patients expiring in 1986. Patients with severe degrees of illness have been categorized with patients with milder forms of the same disease. No consideration of "severity of illness" has been included. The Mortality Report does not include all patients at Lakewood Hospital. It is based solely on data of some but not all Medicare patients.

The data displayed in the report has been reviewed and found to agree with Lakewood Hospital records as regards the numbers, names and principle diagnoses of Medicare patients dying within 30 days of admission. Of the 242 deaths, 46 patients died following discharge. However, the total number of Medicare patients admitted was found to be 3,393 rather than the 2,188 reported. Such a large discrepancy seems unlikely to be explained by subsequent admissions to other hospitals. The existence of an error in total admissions would of course affect the mortality rate calculation.

Lakewood Hospital differs from the "average" hospital.

- Resources in the Lakewood Hospital area include a large number of nursing homes which are sources for transfers of acutely ill elderly patients with chronic conditions, for whom death is a high likelihood.
- The presence of a highly sophisticated medical and surgical cardiac service accounts for the admission of many patients with more severe heart problems.
- A dedicated cancer unit and cancer specialists explain the admissions of large numbers of terminally ill cancer victims.

- Lakewood Hospital operates a fully-certified Paramedic-staffed ambulance service bringing the critically ill and severely injured to its highly skilled Emergency Department.

- The Hospital has a reputation among Western Greater Cleveland doctors of having the finest group of in-house critical care doctors, resulting in the preferential admission of more severely ill patients.

- A multi-specialty health care approach to problems of the elderly has been developed at the Hospital. As a result, geriatric patients with multiple problems are frequently admitted.

- Thus Lakewood Hospital has achieved a recognized competence in caring for the critically ill patient.

Analysis of the records of the 242 patient deaths revealed significant information which was not considered by HCFA in determining the Predicted Mortality Rates.

- Age is a significant factor in predicting mortality. The average age for Medicare patients in the 16 categories admitted to Lakewood Hospital was 75.8. The average age of patients who died was 78.3. The average age of Medicare Patients admitted in Cuyahoga and surrounding counties in the last quarter of 1986 was 72.6.

- Data reviewed by HCFA was limited to the first five clinical diagnoses listed pepatient. Of the total deaths attributed to Lakewood Hospital, 50 patients (20.6%) were found to have additional diagnoses which were not considered.

  - In the case of some patients whose disease had reached end stage, the patient and family agreed that no heroic measures should be undertaken in their hospital care. As examples, five of the six urologic deaths, 15 of the 19 cerebrovascular deaths and 19 of the 34 cancer deaths had "no heroic measure" orders written upon or within 96 hours of admission.

  - As an indication of the need for a severity of illness weighting system, the review of deaths due to Cerebrovascular Accidents (stroke) revealed that of the 19 deaths, 12 patients were unresponsive on admission. Among the 28 deaths due to Severe Acute Heart Disease, 11 suffered cardiac arrest prior to being admitted to the Lakewood Hospital Cardiac Care Unit.

The quality of care provided at Lakewood Hospital is of the utmost concern to the Board of Trustees, Administration, Medical Staff and employees. Lakewood Hospital is fully accredited by the Joint Commission on Accreditation of Health Care Organizations. An extensive Quality Assurance Program exists which monitors patient care and reviews every indication of a potential quality problem. The Quality Assurance Program includes a comprehensive and systematic review and evaluation of the quality of care provided in compliance with the JCAHO standards. The Program encompasses continuous monitoring and evaluation of high risk and frequently performed diagnostic and therapeutic procedures. Information such as that contained in the Mortality Report receives strong emphasis in the process.

William E. Rush, M.D.
Vice President, Medical Affairs
Lakewood Hospital - Medicare Provider No. 36-0212

10/23/87

COMMENTS ON THE HCFA MORTALITY DATA
Lawrence County General Hospital
Ironton, Ohio

Provider 360007
October 26, 1987

The data used by HCFA indicate that a total of 101 Medicare patients admitted to Lawrence County General Hospital died within 30 days of admission. Of these, 86 died while still a patient of the Hospital, while 15 died after discharge. Our own records indicate that 1,375 Medicare admissions occurred in 1986. HCFA statistics show 770 cases treated at the Hospital. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Lawrence County General Hospital as stated by HCFA is correct. It is impossible to determine the percentage of the 15 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis. The data released by HCFA is a type of statistical analysis and can do no more than identify potential areas for further evaluation. Such data cannot be used directly as a measure of the Hospital's performance.

In the 16 diagnostic categories that we previewed, the Hospital's actual mortality rate falls inside the range of the predicted mortality rate. Our medicare admissions account for 39% of our total hospital admissions. This information will be assimilated into the Hospital's overall quality management process.

Quality of Care is a paramount concern for the hospital's governing board, medical staff and management. Any indication of potential quality problems, including a mortality rate that is higher or lower than predicted, leads to a prompt investigation to determine if a problem, in fact, exists. When quality problems are identified, corrective action is taken.

The American Hospital Association and other organizations, including the Joint Commission for Hospital Accreditation, are investigating methods of evaluating hospital quality that rely on measures other than mortality rates, and we look forward to the results of those efforts.

Sincerely,

Eric Freeburg
Executive Director

EF/ew

RE: Licking Memorial Hospital, Newark, Ohio
Provider Number: 360218

Data Verification:

The mortality indexes provided by the Health Care Financing Administration (HCFA) were based on a total of 2120 Medicare cases in 1986. Of those, HCFA indicated that 265 patients died within 30 days of admission. By HCFA data, 189 patients died in the hospital while 76 patients died outside the hospital.

Data maintained by Licking Memorial Hospital indicates that 3121 Medicare cases were treated during 1986. Presumably the discrepency (3121 vs. 2120) reflects multiple admissions of some patients during the year. The hospital did not attempt to verify the basis for the 2120 cases cited by HCFA.

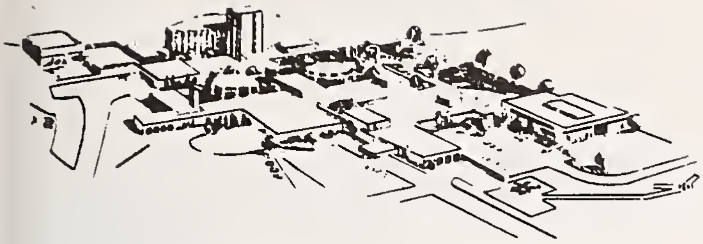
Hospital records indicate that 210 Medicare patients died at Licking Memorial Hospital during 1986. Twenty-one (21) or 10% of these deaths were not reflected in the HCFA data even though the data provided to HCFA as part of the billing process clearly showed that these patients had died. One case was found where HCFA indicated that the patient had died two days after leaving the hospital when, in fact, the patient died in the hospital.

The hospital made no attempt to verify the accuracy of the deaths of the 76 patients HCFA claims died after they left the hospital.

Data Interpretation:

Licking Memorial Hospital's actual mortality rate fell within the HCFA "range of predicted mortality rates" in every category. Despite this, the hospital is concerned about the release of this type of data when, in the one area we were able to verify data, an error rate of 10% was uncovered. Determining mathematically which group of patients was "expected" to die seems difficult enough. However, when such a formula is applied to inaccurate data, drawing meaningful conclusions would be very difficult.

Licking Memorial Hospital
1320 West Main St., Newark, OH 43055, 614/344-0331



LORAIN
COMMUNITY HOSPITAL

3700 Kolbe Road
Lorain, Ohio 44053-1697
Phone (216) 282-9121

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

We wish to offer the following comments on HCFA's 1986 mortality data.

DATA VERIFICATION

1. The data from HCFA attributes 1,154 Medicare admissions to Lorain Community Hospital during 1986, while our inhouse statistics reveal 2,697 Medicare admissions in 1986. Presumably, the discrepancy reflects a difference in the way the admissions were counted; HCFA only counted a patient's last admission during 1986, while the hospital statistics reflect all admissions during the year. We cannot verify if HCFA's admission number is correct, as we do not have access to a patient's admission history at other facilities.

2. The data received from HCFA indicates that a total of 120 Medicare patients admitted to Lorain Community Hospital died within 30 days of admission, 91 of which died while an inpatient, and 29 died after discharge. Our records indicated that 92 patients died while hospitalized; one patient that was listed as expired on the day of discharge was discharged alive and two cases with death dates after discharge actually expired in the hospital. It is impossible to verify the other 27 cases that reportedly died after admission, as this information is not included in the patient's medical record. Our records indicate that most of these patients were discharged with continuing medical care; 8 were discharged to skilled nursing facilities, 9 went to intermediate care facilities, 3 went home with Home Health services, and one was transferred to a non-acute facility.

3. One case had an incorrect name.

CRITICAL ISSUES IN THE METHODOLOGY

1. The deaths counted are those that occurred within 30 days of admission to the hospital, whether in or outside the hospital.

"Caring for You in Your Community"

CRITICAL ISSUES IN THE METHODOLOGY Continued

Therefore, if a patient was discharged from Lorain Community Hospital after treatment for a medical condition and was fatally injured in an auto accident (within 30 days of discharge from the Hospital), the death would be attributed to Lorain Community Hospital. Likewise, patients transferred to longterm care facilities, such as nursing homes, would be included on Lorain Community Hospital's list if they expired in the nursing home within 30 days of their admission to Lorain Community Hospital.

2. The mortality rate was determined by dividing the number of deaths by the number of Medicare beneficiaries whose last admission in 1986 was to Lorain Community Hospital. If a patient was admitted to Lorain Community Hospital during the year and was subsequently readmitted to another hospital, that case would not be attributed to Lorain Community Hospital's patient base. This is of extreme importance, since the higher the number of cases in the base, the lower the mortality rate will be. Due to HCFA's methodology, it is impossible to verify this number, since a hospital does not know if a patient was subsequently admitted to another facility in 1986.

3. HCFA's statistical model has not been evaluated to determine if the model does detect differences in quality.

4. HCFA's statistics assign a mortality rate and expected range to 15 diagnostic categories. The principal diagnosis, which is defined as the reason for admission (after study), was used by HCFA to assign a patient to one of these diagnostic categories. However, the reason for admission is not necessarily the reason for death. For example, a patient admitted for a urinary tract infection suffers a fatal heart attack; this case would be assigned to the urologic diseases category.

5. The data from HCFA applies only to Medicare patients and not to the rest of the patients treated at Lorain Community Hospital.

EVALUATING QUALITY

1. The mortality statistics do not measure quality, but rather indicate areas that should be investigated by the peer review process. A

EVALUATING QUALITY Continued

review of all deaths by a physician is an integral part of Lorain Community Hospital's Quality Assurance Program and has been done for the last several years.

2. As we all strive to evaluate quality, it must be realized that mortality statistics are only one aspect of quality measurement. Efforts by the American Hospital Association and other organizations to identify measures other than mortality to assess quality will assist all facilities in determining where they fall on the quality yardstick.

Sincerely,

Paul C Bal

Paul C. Balcom
President and Chief Executive Officer

PCB/bw

Attachment

LORAIN COMMUNITY HOSPITAL

CORRECTIONS TO HCFA'S DATA

Patient I.D.#	Date of Admission	Date of Discharge	Date of Death	Correction
[redacted]	8/19/86	9/4/86	9/4/86	Patient did not die on 9/4/86 in the hospital. Patient was discharged to an ICF.
[redacted]	4/11/86	4/12/86	4/12/86	Patient's last name reported as Allen. Patient's last name was Homer and his first name was Allen.
[redacted]	3/4/86	3/6/86	3/7/86	Patient actually expired on 3/6/86.
[redacted]	10/22/86	10/24/86	10/31/86	Patient actually expired on 10/24/86.

MANSFIELD GENERAL
YOUR HEALTH CARE CENTER IN NORTH CENTRAL OHIO

October 20, 1987 Medicare Provider # - 86-0118

Comments about MORTALITY STATISTICS from MANSFIELD GENERAL HOSPITAL, MANSFIELD, OHIO

Raw mortality data should not be interpreted to mean either high quality care or substandard care, but rather should become a basis for peer review activity within the hospital to evaluate the quality of care. This is, in fact, the way these data are regularly used. All hospital deaths are critically reviewed each month by the physician members of each clinical department. Recommendations about improving patient care, which come from these meetings, are relayed directly to the attending physician.

These mortality data are based on the "average" patient. Referral hospitals, such as Mansfield General, care for patients who are more seriously ill than average.

Even so, this hospital's mortality occurrences were within the expected range for overall mortality and for 15 of the 16 separate diagnostic groupings. Group HL (low-risk heart disease) was the only category in which our mortality rate (13%) exceeded the predicted range of 3% to 9%. Cases in this category were, therefore, re-evaluated. HCFA data originally listed 25 deaths occurring in 200 cases assigned to the HL category. Our re-examination of these cases showed the following:

1. One patient, listed as a mortality in the overall statistics, did not die within the time parameters of this study. Death occurred three months after hospital discharge.

2. Nine of the 25 patients listed in the HL group had been assigned an incorrect billing code, which placed them into a different DRG group. Four of them should have been counted with the severe acute heart disease group (HS), one with severe chronic heart disease (HM), one with pulmonary diseases (PN), one with gastro-intestinal diseases (GI), and two were in the "other" category (UN).

Having made these coding changes, our mortality data for the low-risk heart disease group (HL) now show 16 deaths in 191 total cases. This is a rate of 8%, which is within the expected range and brings the mortality rates for all sixteen diagnostic groupings within the expected ranges.

The number of DRG billing code changes was unacceptably high in 1986. Different coding procedures were instituted toward the end of the year which have resulted in a 63% decrease in DRG billing changes during the first half of 1987.

MANSFIELD GENERAL HOSPITAL/335 Glessner Ave./Mansfield, OH 44903-9989/(419) 526-8000
Approved by Joint Commission on Accreditation of Hospitals

VHA
Member of the Voluntary Hospitals of America System.

mgh
Marion General Hospital
McKinley Park Drive • Marion, Ohio 43302 • (614) 383-8400

Comment HCFA Mortality Data
Hospital #360011

INTRODUCTION

Marion General Hospital (MGH) is a 257 bed private, not for profit, acute care facility located in central Ohio. The hospital serves as the subregional referral center for a seven-county area of nearly 300,000 citizens. Approximately 8,600 patients are admitted to MGH annually, approximately 25% of which are Medicare beneficiaries.

Seven skilled and intermediate care facilities totaling 552 beds serve the Marion community. The Medical Director of four of the seven (369 beds) utilizes Marion General Hospital exclusively for acute care needs.

Marion General Hospital is also the acute care provider for HealthOhio, the area's largest health maintenance organization (HMO) which serves over 3,000 Medicare enrollees annually.

Numerous programs of special interest to the elderly draw the over-65 age group to the MGH campus. Cardiac Rehabilitation, an accredited diabetic education program, a grant funded Alzheimer's/related disease project and an elder "V.I.P." program are specifically designed to meet the special needs of elder consumers. Additionally, the hospital has the first JCAH accredited Hospice (which is Medicare approved) in the state of Ohio and conducts a cancer program which has been accredited by the American College of Surgeons since 1983.

Marion General Hospital Quality Assurance Activities

The Board of Directors, administration and Medical Staff of Marion General Hospital have a commitment to providing high quality health care services to the Marion area community. As part of that commitment, quality assurance systems have been established within the hospital and Medical Staff organization. The Quality Assurance mission is to enhance patient safety and satisfaction, promote appropriate utilization of resources, reduce the probability of preventable adverse clinical outcomes, and promote high standards of clinical practice. This is achieved through ongoing systematic, and comprehensive patient care monitoring and evaluation, including among many other elements, indepth review of each patient death.

Analysis of the HCFA Mortality Statistics

MGH analysis of the HCFA findings has been carried out in two phases: 1) validation of statistical data and 2) indepth clinical review of mortalities in the cerebrovascular accident (CE) and severe acute heart disease (HS) categories. The results of that analysis along with a commentary on the HCFA methodology are included below.

Validation of Statistical Data

The data used by HCFA indicate that a total of 1,104 Medicare patients were admitted to Marion General Hospital in 1986. Our own records indicate that 2,317 Medicare admissions occurred. Presumably the discrepancy reflects multiple admissions of individual beneficiaries, however, we are unable to verify this presumption. Marion General Hospital validation of data elements reported by HCFA related to the 170 reported death cases revealed a 3.1% error rate. The majority of errors occurred in the "date-of-death" listing. One patient included in the HCFA data was never hospitalized at Marion General Hospital.

Clinical Review of Martalities

In two of the HCFA diagnostic categories, cerebrovascular accidents and severe acute heart disease, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate.

Though each case was reviewed within 30 days of death or hospital discharge as part of the Marion General Hospital Quality Assurance system in 1986/87, these cases were re-reviewed in October, 1987 by physicians who a) were not involved in the care of the patient during hospitlization and b) did not participate in the prior Quality Assurance review. A 4-level Severity of Illness Index was applied in the second review. Findings were as follows:

CLINICAL SEVERITY CLASSIFICATION
CE/HS categories

			#	%
1.	a.	Death the expected outcome of advanced state of chronic disease or condition.	15	29
	b.	Irreversible loss of critical body functions as a result of an acute illness or condition.		
2.		Development of an uncontrollable death producing complication which is due to the primary disease not due to iatrogenic error.	35	69
3.		Death unexpected, but accompanied by appropriate care by individual practitioners and by the provider system to which the patient, for whatever reason, did not respond.	0	0
4.		Death unexpected, and/or associated with a procedure or treatment not ordinarily considered high risk. Refer to department for indepth review of practitioner/provider clinical performance.	1	2
		TOTAL	51	100

The single case classified as Number 4 had been determined an "expected death due to patient disease" at the time of the initial Quality Assurance review. As a result of the second physician reviewer's assessment, the case will be referred to the Department of Internal Medicine for further in-depth analysis.

It is significant to note that on re-review, the principal diagnosis in three (HS) cases was terminal cancer, rather than severe acute heart disease. Removal of these cases from the severe acute heart disease category changes the actual death rate (HS) to 54% which is within the range of predicted mortality for the category (addition of the same three deaths to the cancer category results in an increase in actual mortality to 27%, which is still within the predicted range of 14 - 36%).

Seven of seventeen cerebrovascular accident cases died after hospital discharge. In six of the seven, death certificates as well as hospital records were examined. In each case death was the expected outcome due to the severity of illness (MGH classifications 1 or 2) and the death certificate substantiated the cause of death was attributed to the cerebrovascular problem or a related complication.

The Reliability and Validity of the HCFA Model

The HCFA statistical model measures the relationship between a limited number of patient characteristics (age, sex, number of prior hospitalizations within the year, whether the patient was transferred from another hospital, and whether the patient had other complicating illnesses) and the risk of death. Whether these are the most significant factors influencing the risk of death is unknown. The model fails to consider a wide range of factors which are generally accepted as having impact on mortality. Most significant of these is the severity of the patient's illness.

A very serious limitation of the model is that it has not been validated. Whether the hospitals whose actual mortality rates are outside the predicted range are more or less likely to provide higher or lower quality of care is not established.

Conclusion

Considering the incidence of data inaccuracies, and the weaknesses of the HCFA model, particularly its failure to consider illness severity, it is clear that the HCFA statistics cannot be used to measure the quality of a hospital's performance.

Marion General Hospital endorses the efforts of the American Hospital Association and the Joint Commission on Accreditation of HealthCare Organizations in seeking meaningful and reliable models for measuring health care quality. We also strongly support the principle of an informed consumer. Clearly the HCFA measure has not been proven to be a reliable indicator of quality. We caution reviewers against using these statistics to make judgments about the quality of health care at Marion General or at any other provider hospital.

P. Donald Muhlenthaler

P. Donald Muhlenthaler, President
Marion General Hospital
Marion, Ohio

10-27-87
Date

EAST OHIO REGIONAL HOSPITAL
AT MARTINS FERRY

36-0080

October 23, 1987

Mr. William L. Roper, M.D.
Administrator
Health Care Financing Administrator
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

Following a review of the Medicare patient mortality data for-East Ohio Regional Hospital, we feel that undue misunderstanding may be caused in releasing these raw data to the general public. It is important that the community understand the limitations of the HCFA information. In particular, direct knowledge of the severity of patient illness and complicating secondary diagnoses must be available before informed judgements as to quality of medical care can be made.

East Ohio Regional Hospital Medicare patient mortalities fell within the expected range in all but one clinical category--renal failure. However, this must be interpreted with the additional knowledge that the group of Medicare patients with renal failure was extremely small, had an average age of 84 years and typically had multiple complications to their primary diagnosis. These factors were determined through the internal Quality Assurance activities at EORH.

In conclusion, East Ohio Regional Hospital agrees with and affirms the statement which HCFA itself made with the release of this data: "Until we have developed additional statistical measures to deal with complex issues as severity of illness, we cannot and do not recommend the use of this information by itself to make judgements about the quality of care in an individual hospital..."

Sincerely,

Thom P Galinski

Thomas P. Galinski, President
Ohio Valley Health Services and
Education Corporation

90 North Fourth Street
Martins Ferry, Ohio 43935
614/633-1100

Mary Rutan Hospital
Bellefontaine, Ohio

Provider Number: 36-0197

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

MH

MARYMOUNT HOSPITAL

12300 McCRACKEN ROAD • GARFIELD HEIGHTS, OHIO 44125-2975 • TELEPHONE 581-0500

October 27, 1987

Mr. William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Department of Health & Human Services
P.O. Box 26684
Baltimore, MD 21207

Dear Mr. Roper:

In response to your communication of September 21, 1987 and attachments to same, Marymount wishes to express its appreciation for the opportunity to respond to both the intent and implications of the proposed HCFA release of selected mortality information.

As our first and overriding comment, we wish to express grave concern that the statistical analysis methodology used to conduct this study may be prone to significant misinterpretation if it is presumed that it can be used as a direct measure of hospital performance. At best we can only concede that this methodology is a reasonable way to identify potential areas for further evaluation.

Marymount is not in a position without additional information to comment upon the validity of the data base, the statistical methodology, or the conclusions drawn from the analysis of same. We do, however, wish to bring to the forefront several mitigating circumstances which we feel this methodology may not adequately address. These concerns are:

1. That the presence of certain programs, in Marymount's case, a regionally recognized Oncology Program, may account for a higher incidence/presence than would be experienced in other community/tertiary hospitals.

2. The age distribution of patients in a particular institution and its recognition as a center that provides care to an aging population might well result in a natural selection of this institution by individuals who have a higher complexity of illness than those that might approach other institutions. As we understand it, your methodology does not take into effect the impact of severity of illness.

3. We fail to understand the correlation between individuals that have died within a hospital and those that have died outside the hospital in settings/circumstances that may bear no correlation to the nature or quality of services that they received while hospitalized.

4. By choosing to analyze only the last admission, an inaccurate portrayal of the institution's performance might result.

You should be aware that Marymount's Mortality Review Process is based upon HCFA Approved Mortality Criteria. A 100% review of all mortalities has disclosed no unanticipated deaths or mismanagement of cases.

We applaud the concern and sensitivity with which this process has been approached but wish to again surface a concern that this process is subject to significant misinterpretation. If you accept the basic premise that the methodology utilized is not a valid indicator of the quality of care within an institution, then significant disclaimers should accompany any release of data.

We wish to again thank the Department of Health and Human Services for the opportunity to review and comment upon the proposed release of selected mortality information.

Sincerely,

Thomas J. Trudell

Thomas J. Trudell
President and
Chief Executive Officer

TJT/jk:0866

Massillon Community Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
P.O. Box 26676
Baltimore, Maryland 21201

Re: Mortality Rate Data Release; File HSQ-148-GNC

Dear Dr. Roper:

Massillon Community Hospital maintains the highest standards of quality medical care possible. These standards are achieved through the Hospital's dedication of manpower and resources to establish, monitor and respond to medical care quality indicators.

The Hospital does endorse efforts to provide the public and interested parties with information regarding the quality of care it provides. However, publication of mortality rates does not provide a meaningful descriptor by which to judge the quality of care individual hospitals provide. Furthermore, this information may be inappropriately compared between different health care institutions.

Massillon Community Hospital urges the Health Care Financing Administration (HCFA) to request input from health care providers to develop accurate and meaningful indicators of quality medical care.

Jointly, we may achieve the desired goal of providing individuals and various groups with useful information to make informed choices and decisions.

Sincerely,

Jack W. Topoleski, President
Massillon Community Hospital
(provider number 360100)

JWT/iw

cc: OHA
AHA

Massillon Community Hospital 875 Eighth Street N.E., P.O. Box 805, Massillon, Ohio 44648, (216) 832-8761

THE McCULLOUGH-HYDE MEMORIAL HOSPITAL, INC.
OXFORD, OHIO 45056 • PHONE (513) 523-2111

September 28, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: McCullough-Hyde Memorial Hospital, Inc.
360046 Mortality Information

Errors noted:
HM -- Severe Chronic Heart Disease -- actual mortality rate should be 12% rather than 15%.
PN -- Pulmonary Disease -- actual mortality rate should be 9% rather than 11%.

The information as presented is very difficult or impossible to use in a meaningful manner. Each diagnostic category has a range of pedicted mortality rates where many are so wide that the comparison of one hospital's actual to the range is of no use. In a very few cases the data may have some benefit in identifying potential areas for future evaluation. The data lacks reliability and the methodology fails to validate the data generated.

However, the biggest concern is that the publishing of percentages without the entire statistical picture will result in negative impressions by the public for any institution, and therefore, the whole exercise does not generate much, if anything, that is useful. People will see that 25% of such and such a diagnosis category died in a particular hospital, and the fact that the "predicted range" is 10%-75% has no benefit.

The list of mortality statistics has no more use than for McCullough-Hyde to advertise that, "only 4% of our hospital's Medicare patients expired while they were under our care" or that "the Medicare patients of McCullough-Hyde who died in 1986 had an average age of 80 years -- beyond the expected lifetime!"

We only hope that any small benefits that may be generated by wide publicity of this data will offset some of the inappropriate concern and some of the bureaucratic expense that was caused.

Sincerely,

RA Daniels

Richard A. Daniels
Administrator

MEMORIAL HOSPITAL

715 SOUTH TAFT AVENUE ● FREMONT, OHIO 43420-3296 ● (419) 332-7321

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, DC 20201

Dear Dr. Roper:

We, at Memorial Hospital, applaud HCFA's concern and determination to begin the assessment of the issue of the quality of health care in the United States. We have long held that this is truly the issue facing our industry at present in the eyes of the American people. In addition, we can appreciate, as you must also, the complexities involved with attempting to define and evaluate this issue.

In reviewing the data and their proposed release in December, we have the following comments:

- It is important that the public understand that mortality rates are only one indicator that is monitored in a comprehensive quality assurance program such as we and most other hospitals currently have in place. Taken on their own without review and investigation, mortality statistics have very little meaning. Taken within a comprehensive program, they are monitored and reviewed as an indicator that may provide direction for additional review and evaluation of the overall quality of care being provided within an organization.

- It is also important that the public understand that comparing mortality rates of one organization to another provides little insight as to the quality of care being rendered at any one institution. Given that this is only one year of data makes the numbers less relevant, in addition to which they are merely gross numbers that do not take into account the types of patients from a severity and complexity of illness standpoint that are being cared for in each institution. Therefore, we feel that extreme caution is necessary when the public reviews and attempts to evaluate this information.

- Finally, we have reviewed the data as presented to us by your organization. We found that the mortalities indicated were patients we cared for in our institution during 1986. Of the 127 mortalities indicated, 97 occurred during hospitalization while 30 occurred within thirty days after discharge. Your numbers indicated that we had 1053 cases in 1986 while our review indicates that we had 1766 cases. Since your organization did not provide us with the full list of cases used in the review, we cannot accurately comment on the validity of the data with respect to our institution.

Thank you for this opportunity to comment.

Sincerely,

Jack M. Bryan

Jack M. Bryan
President

:pt

cc: Dan Lease
R. J. Purdy
Scott Farrell, Chairman Q.A. Committee
Don Newkirk, OHA

Saint Anthony Mercy Hospital
1430 SOUTH HIGH STREET • COLUMBUS, OHIO 43207

October 23, 1987

William L. Roper, M.D.,
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

In June, 1987, the Administration of Mercy Hospital in Columbus, Ohio initiated a proactive analysis of their institution's mortality/outcome statistics for calendar year 1986. This study was performed by Jackson and Associates of Columbus, Ohio and included all patients who died, both Medicare and non-Medicare patients.

The report that follows will deal with only the Medicare patients who died during 1986 while an inpatient at Mercy Hospital, within 30 days of their admission date, and with the 16 Medicare patients who were discharged and died within 30 days of their last admission.

Data received from HCFA has been verified and discrepancies identified in categories of age and discharge date. Three of the 19 patients recorded as "out of the hospital" deaths in the HCFA report actually died in the hospital during the admission used as the "final" admission for the HCFA study. (Please see attached corrected copy.)

I would like to bring to your attention that Mercy Hospital merged with St. Anthony Medical Center in Columbus, Ohio on August 5, 1987. Our new name is St. Anthony Mercy Hospital. We are currently listed in the Federal Register as Mercy Hospital.

The enclosed analysis of our 1986 Medicare deaths confirms a successful attempt at Mercy Hospital to identify severity of illness and quality of care provided for Medicare patients who expired at Mercy Hospital during 1986.

Sincerely,

Sister Mary Lawrence

Sister Mary Lawrence
C.E.O.

a member of
FRANCISCAN SISTERS OF THE POOR • HEALTH SYSTEM, INC.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

ANALYSIS OF MEDICARE PATIENT DEATHS IN 1986

MERCY HOSPITAL

COLUMBUS, OHIO

PREPARED BY: JACKSON AND ASSOCIATES
1591 FISHINGER RD.
COLUMBUS, OHIO 43221
DAVID L. JACKSON, M.D., Ph. D.
PRESIDENT

OH 126.1

In June of 1987, the leadership at Mercy Hospital in Columbus, Ohio initiated a proactive analysis of their institution's mortality/outcome statistics for calendar year 1986. This study was performed during July to September of 1987 by Jackson and Associates of Columbus, Ohio. This study included a review of the organization and delivery of care in the hospital's intensive care settings, as well as a detailed review by an independent nurse and/or physician of every patient record for all patients who died at Mercy in calendar year 1986.

This study included all patients who died, both Medicare and non-Medicare patients. The report that follows will deal only with the Medicare patients who died during 1986 while an in-patient at Mercy Hospital within 30 days of their admission date. That is, it covers in detail all the 87 Medicare patients who died while in Mercy Hospital who are included in the Health Care Financing Administration (HCFA) mortality report. This project involved a detailed file review of the hospital chart for all the patients in the study, including demographic information about each patient (age,hospital record number,initials,date of birth,dates of admission and death, length of stay, source of admission, route of admission, hospitalizations in previous 5 years when available) and an evaluation of the patient's chronic health status prior to this admission (see enclosed data recording form, enclosure I). In addition, the admitting diagnoses (up to three), the admitting chief complaint, whether the patient was admitted to an intensive care unit on admission or later in the hospitalization, whether the patient required mechanical ventilation on admission or later in the hospitalization,and whether the patient had a "no-code" order written during the hospitalization.

From the clinical record, an abstract was made, recording all abnormal laboratory data on admission, as well as the patient's blood pressure, electrocardiographic evaluation, key abnormal physical findings, and a brief description of the patient's hospital course. Major therapeutic interventions, complications and iatrogenic events which caused recorded morbidity were also recorded. The physician of record and the number, timing and reason for consultations was listed. An assessment of whether heroic interventions were prolonged beyond that indicated in the chart was made by an experienced ICU physician and medical ethicist, who had never been associated with either the Administration or medical staff of Mercy Hospital. The documentation of discussions on this topic ("do not resusscitate" or "no code") and intensity of care rendered related to expressed family wishes were also evaluated.

All cases of patient mortality at Mercy Hospital in 1986 were reviewed and analyzed by disease grouping. Patients were categorized by the major disease process, present on admission, that most directly contributed to the patient's death. The category/groupings included:

1.) CARDIAC DISEASE,
2.) CANCER/ONCOLOGY,
3.) PULMONARY DISEASE,
4.) NEUROLOGICAL DISEASE,
5.) METABOLIC/ELECTROLYTE DISEASE,
6.) GASTROINTESTINAL/HEPATIC DISEASE,
7.) PRIMARY INFECTIOUS DISEASE,
8.) PRIMARY HEMATOLOGICAL DISORDERS,
9.) RENAL DISEASE,
10.) OBSTETRICS/GYNECOLOGY,
11.) ORTHOPEDIC.
12.) OTHER

Because of the small numbers involved, no separate categories for ophthalmologic, severe trauma, or primary urological disease were utilized.

The chart review and administrative and clinical leadership interviews were completed in July, August and September of 1986. The data from this study were then compared to the Medicare mortality data released by the Health Care Financing Administration on September 21, 1986. The patient data from these two sources were then cross-validated. The HCFA data reported on 103 Medicare patient deaths at Mercy Hospital in calendar year 1986 (6 admitted in 1985 who died in 1986 and 97 admitted and died in calendar 1986).

The HCFA data base includes only patients who died within 30 days of their final hospital admission date. The HCFA records include 84 patients who died in the hospital within the first 30 days of their final hospitalization and 19 patients who are reported as having died after discharge from the hospital but within 30 days from the date of the final hospital admission. The overall 1986 mortality rate calculated for all applicable Medicare patients at Hospital was 10%, as reported in the HCFA report (103 patients in 1,006 cases). This is near the bottom end of the predicted mortality range (8 to 15%) generated by HCFA, as adjusted by HCFA for age, sex, co-morbidities, etc.

A complete review of all appropriate hospital records at Mercy Hospital verified that all the 103 patients included in the HCFA report were treated at this hospital. However this review of the charts of all patients documented that 3 of the 19 patients recorded as "out of hospital deaths" in the HCFA report actually died in the hospital during the admission used as the "final"

admission for the HCFA study (as documented by the admission date used in the HCFA report). The 87
Medicare patients that died in the Hospital within the 30 day period after admission used in the HCFA methodology averaged 75 years of age, with an average length of stay of 14 days and an average "severity score" of 2.0 (see enclosure II).

It is obvious that the chart review of all in-patient deaths at Mercy hospital in 1986 was completed prior to the availability of any data on the "out of hospital" deaths included in the HCFA report. Hence the detailed analysis of the in-hospital patient deaths by Jackson and Associates is based on the review of the medical records of the 87 Medicare patients who died in the hospital during 1986 (with a less than 31 day length of stay before death). There are also 16 Medicare patients in the HCFA report who died after discharge from their final hospitalization, but within the 30 day period after the last hospital admission date. The Hospital's analyses of these hospital based deaths are based on data from the 87 Medicare patients that in fact died in the hospital during 1986.
It should be noted that a review of the hospital records of the 16 patients who died after discharge that are in the HCFA report was done by Dr. Jackson (see below).

Analysis of the HCFA report and the Mercy Hospital review reveals that there is generally good agreement with the distribution of deaths by diagnostic categories. There was a total of 24 cardiac deaths in the HCFA report, with 28 in the Mercy study. There were also 16 cancer patients, 9 neurological patients, and 21 pulmonary patients in the HCFA mortality report, with 19 cancer, 11 neurological, and 15 pulmonary patients in the Mercy study. The minor differences in this distribution are related to the different inclusion criteria for categorization used in the two studies. In the Mercy study, each patient was placed in the disease category that was present as one of the admitting diagnoses and which, after a thorough chart review, was the disease process most directly responsible for the patient's death. The close agreement of the outcome of the two selection processes does allow the two patient groups to be compared.

A preliminary review of the hospital records of the 16 Medicare patients who died after hospital discharge (as out-patients) revealed that they presented for their final hospitalization with a primary diagnosis that was very similar to the in-patient death group distribution (cardiac disease=5/16, cancer = 3/16, pulmonary disease= 3/16, neurological disease= 2/16, with the other three patients scattered amongst the other 8 categories). All of these patients had a serious chronic/recurrent illness as part of their hospital course and discharge prognosis. Prognosis was "poor" ,"grave" or "guarded" in 14/16 patients in this group. The age of these patients and their past medical health status evaluation did not appear to differ from that for the in-patient mortality group. A fatal outcome in the near future was the expected outcome at discharge for a majority of these patients and death was clearly not unexpected in at least 13 of these 16 patients.

With an overall mortality rate of 10% for all Medicare patients who fell within the HCFA study inclusion criteria (the predicted range of mortality for this patient mix was 8 to 15%), it is clear that Mercy Hospital's overall performance is excellent. Thus the minor differences in patient category distribution used by the HCFA study and by the prospective Mercy Hospital review do not distort in any way the pattern of performance or the excellent outcomes experienced by patients at Mercy Hospital overall and in the key patient categories.

The HCFA report presents data on 113 "low risk" cardiac patients, with a mortality of 1% (1 patient). This is below the lower boundary for predicted mortality rates for this diagnostic category. There were also 35 "severe acute heart disease" patients with a mortality of 31% (11 patients) and 54 "severe chronic heart disease" patients with a mortality rate of 22% (12 patients). Hence there were 202 cardiac patients with a total of 24 deaths in the HCFA analysis. In the Mercy study by Jackson and Associates there were 28 patients whose death was primarily related to their underlying cardiac disease (this category included 4 patients in the "other" category in the HCFA analysis). These 28 patients were on average 73 years old, and had an average length of hospital stay (from admission to death) of 8.8 days. Their admission "severity score" (on scale of 1.0 to 4.0, see enclosure II) was 2.1 (see Table 1A). Twenty-six of the 28 cardiac patients who died were patients in the Mercy Intensive Care Unit (ICU) or Coronary Care Unit (CCU) during at least some period of their hospitalization. Fifteen of the 28 required mechanical ventilator support while in the hospital, and 15 of the 26 were declared "do not resusscitate" or "no-code" before death. Nine of the 28 (31%) were in a "terminal" condition on admission.

The HCFA study reports that there were 39 cancer related, Medicare admissions to Mercy Hospital in 1986 that met criteria for inclusion in the HCFA analysis of hospital mortality. They report 16 deaths for a mortality rate of 41%, well within the range of predicted mortality rates for Mercy Hospital case mix in this category of 17% to 47%. In the Jackson and Associates study at Mercy, there were 19 patients who died from complications primarily related to the diagnosis of cancer. These patients were older than the average cardiac patient (76 years old), had a longer average length of stay of almost 15 days and a lower probability of survival score on admission (1.8 vs. 2.1) than the cardiac category patients. These oncology patients were less frequently admitted to the ICU (only 11/19) ,were less frequently placed on a ventilator (5/19), and were more frequently declared "no-code" (11/19=57%). Nine (9) of the 19 (47%) were considered to be in a terminal state on admission.

While there are not adequate normative data available for comparison with these data, it is clear that the Medicare cancer patients at St. Anthony-Mercy are, when reviewed in depth, an extremely seriously ill, older patient group. Even in the face of this the reported mortality for cancer patients at Mercy Hospital is within the predicted range for similar patient groups when reviewed on a national basis

In the HCFA study, there were 134 pulmonary disease patients who met the study inclusion criteria. They report a 16% mortality rate (21 patient deaths). This mortality rate is again well within the range of predicted mortality rates for this disease category and Mercy Hospital's case mix (11% to 26%) .
In the Jackson and Associates study at Mercy Hospital, 15 patients who died in 1986 from events primarily related to pulmonary disease were identified. These patients were quite similar to the cardiac group of patients, with an average age of 73 years, an average length of stay of 13.2 days, and an average severity score of 2.0. Twelve (12) of the 15 (80%) were treated in the ICU during their hospitalization. Sixty (60)% were declared "no-code" and 6 of the 15 (40%) were considered to be terminal on admission.

The fourth major category of patient deaths at Mercy Hospital in the HCFA analysis is neurological illness. HCFA categorized 28 patients at Mercy in 1986 who met the criteria for inclusion in the study in the "cerebrovascular accidents" category. The mortality for this group was 32% (9 patients). This is well within the predicted range of mortality rates for this case mix (15 to 48%). In the Jackson and Associates study at Mercy Hospital, there were 11 patients whose primary cause of death was in the neurological area (including, but not limited to, stroke). This patient category was the oldest of all the patient categories at Mercy Hospital (average age of 78 years), had the shortest length of hospital stay between admission and death (7.8 days), were by far the most profoundly neurologically impaired on admission (Neuro Score of 3.5 vs. 1.8-2.1 for all other groups), and had the lowest probability of survival/ severity score of 1.5. Seventy three(73)% of the Neurological patients were admitted to an ICU during their hospital care, 7/11 (64%) were "no-code" patients, and 78% (9/11) were considered terminal on admission. This category of patients who died in the hospital was the most critically ill of any of those studied. The neurological category and the cancer patient category both contain very substantial proportions of patients who were determined to be "no-code" at some point in their hospitalization. Even more importantly from a quality of care review perspective, a very high percentage of these patients who ultimately died in the hospital were considered to be terminal on admission. In future iterations of the HCFA study, some consideration to the possibility of the inclusion of some recognition of the importance of the "non-heroic" intervention status of large numbers of the patients who die while in the hospital because that is often the most appropriate and humane place for them to die with the provision of effective comfort care.

The report HCFA has compiled for public release in December of 1987, based on 1986 mortality data, is certainly a significant improvement on the gross mortality statistics released last year. This previous study was based on 1985 data and did not include any attempt to adjust for case mix/ severity. The issue of the choosing the most appropriate methodology to measure surrogates for the quality of care will continue to be one of lively scholarly debate and great public importance. The synergism possible between the efforts of HCFA and the independent, proactive analyses done by hospitals like Mercy should be encouraged and data freely exchanged between the various groups evaluating different methodologies used to measure the "quality of care."

DATA SHEET CODE
MORTALITY EVALUATION STUDY

3.)SOURCE OF ADMISSION:
1=HOME 2=NURSING HOME 3=OTHER HOSPITAL 4=OTHER/UNKNOWN

4.)ROUTE OF ADMISSION:
1=AMBULANCE TO ER 2=FAMILY/SELF TO ER 3=FAMILY/SELF FROM DOCTOR'S OFFICE 4=TRANSFER FROM CAREUNIT OR OTHER

5.)PAST MEDICAL STATUS:
1=GOOD GENERAL HEALTH, WITH NO KNOWN CHRONIC ILLNESS OR MEDICATIONS WHICH REQUIRE REGULAR PHYSICIAN OFFICE VISITS

2=STABLE CHRONIC ILLNESS, WITH STABLE MEDICATIONS (NO CHANGE DOCUMENTED OVER 1 MONTH PRIOR TO ADMISSION) AND/OR STABLE MEDICAL CONDITION (NO HOSPITALIZATION OVER THE THREE MONTHS PRIOR TO THIS ADMISSION).

3=UNSTABLE CHRONIC ILLNESS WITH RECENT MEDICATION CHANGES, AND/OR FREQUENT OFFICE VISITS, AND/OR RECENT (WITHIN THREE MONTHS OF THIS ADMISSION) HOSPITALIZATION.

4=PRE-EXISTING HOSPICE CARE/CHRONIC TERMINAL ILLNESS ON ADMISSION

5.)UNKNOWN

ENCLOSUE II

PATIENT OUTCOME PROBABILITY ON ADMISSION ("SEVERITY SCORE"):
1.0= Terminal on Admission
1.5= Terminal Condition Documented Within First 24 Hours
2.0= High Risk Illness with Low Probability of Positive Outcome, but with a measurable chance of survival with Excellent Care (eg. Cardiogenic Shock)

3.0= Significant Acute Illness, with Survival at p>.50, but with a Reasonable Probability that Fatal Outcomes are to be Expected, even with the Best Possible Care

4.0= Unexpected Mortality (eg. Very Low Probability Fatal Outcome, as in an Anaesthetic Death during a Minor Procedure

NEUROLOGICAL SEVERITY SCORE:
1= Alert, Oriented, Normal Neurological Exam
2= Lethargic, Confusional State, Focal Neurological Findings
3= Arousable to Stimulation, But Non-Verbal
4= Comatose, Responsive To Pain
5= Unresponsive to Pain/ Brain Dead

DISEASE CATEGORIES:
1= Cardiac Disease
2= Oncology
3= Pulmonary Disease
4= Neurological Disease
5= Metabolic/Electrolyte
6= Gastrointestinal/Hepatic Disease
7= Primary Infectious Disease
8= Hematological Disease
9= Renal Disease
10= Obstetrics/Gynecology
11= Orthopedic
12 = Other

73 MEDICARE

TABLE 1A: PATIENT DEATHS IN 1986, TOP 4 DISEASE CATEGORIES MEDICARE PATIENTS WITH LOS OF 30 DAYS OR LESS: AVERAGE FOR ALL PATIENTS IN CATEGORY

DISEASE CATEG.	NUMBER (N)	Average AGE (YRS)	Average LOS SCORE (DAYS)	Average NEURO SCORE (0-5)	Average SEVERITY (1-4)	Average CONSULTS (TOTAL)
CARDIAC	(28)	73	8.8	2.1	2.1	2.0
CANCER	(19)	76	14.9	1.6	1.8	2.7
PULMONARY	(15)	73	13.2	1.8	2.0	2.0
NEUROLOGY	(11)	78	7.8	3.5	1.5	1.6

* THE ABOVE TOTAL NUMBER OF 73 INCLUDES PATIENTS WHO FELL INTO THE TOP 4 DIAGNOSTIC CATEGORIES. 14 PATIENTS WHO FELL INTO SEPARATE (SMALL NUMBERS) CATEGORIES AND 16 PATIENTS WHO EXPIRED AFTER DISCHARGE FROM THE HOSPITAL, BUT WITHIN 30 DAYS FROM THE DATE OF THE FINAL HOSPITAL ADMISSION ARE NOT INCLUDED IN THESE NUMBERS.

Mercy Hospital

P.O. Box 418 Hamilton, OH 45012-0418
Hamilton-100 Riverfront Plaza
Fairfield-3000 Mack Road

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for the opportunity to review and respond to the mortality rates calculated by your department on Medicare patients treated at Mercy Hospital, prior to the information being publicized.

The Medicare Provider Number for Mercy Hospital is 360056, and the comments that Mercy Hospital would like included in your published report are as follows.

At Mercy Hospital, quality of care is always of the utmost concern to our governing board, management and medical staff. If there is any indication of potential quality problems, including a mortality rate that is higher or lower than predicted, a prompt investigation is made to determine whether or not a problem exists.

When quality problems are identified, corrective action is swiftly taken through the Quality Assurance Program. In terms of the Hospital's mortality rate, all deaths are reviewed by assigned members of the medical staff from each division on an ongoing basis. If for any reason the criteria is not met, the case is referred to a physician on the Quality Assurance Committee for review.

The objective of HCFA was to present information which addresses the actual death rate of each hospital compared to what is expected for each particular hospital given the characteristics of patients admitted. The statistical model developed by HCFA measures the relationship between a limited number of patient characteristics and the risk of death. However, in order for it to be useful, it is important that data of this nature be reliable and valid.

In determining the usefulness of the mortality rates provided by HCFA, it is important to consider a number of issues. First of all, the reliability of the model is unknown because the ability to detect differences in quality has not been evaluated. HCFA's data assumes that each hospital's patients are "average" except for the few characteristics included in the statistical model. The model does not include measures of severity, whether or not the patient was transferred to the hospital from a nursing home, if the patient was receiving treatment at home prior to admission, whether or not the patient had a terminal illness, or the patient's psychological state or general health status. As a result, those hospitals that treat an unusually large number of severely ill patients may have higher than predicted mortality rates.

Mercy Hospital treats a large geriatric population with multi-system disease. This automatically puts the patients in a high risk category upon admission. Therefore, the type of Medicare patients that are admitted to Mercy Hospital are not necessarily the "average" Medicare patient HCFA used in determining the range of predicted mortality rates.

The second consideration is that the model has not been validated. It has not been determined whether the hospitals, whose actual mortality rates are outside the predicted range, are more or less likely to provide higher or lower quality of care. This model does not measure the hospital's performance on quality, but measures the relationship between mortality and a selected group of patient characteristics.

The last consideration is that the HCFA data is not all-inclusive. The mortality rates apply only to Medicare patients and differ from other indicators of inpatient mortality. These rates are calculated using only deaths that occurred within 30 days of the last admission of a Medicare beneficiary to a hospital during 1986. These mortality rates also reflect deaths that occurred outside of the hospital within 30 days of the admission date.

In order to show the impact that these differences have on mortality rates, attached is Mercy Hospital's actual Medicare mortality rates using: 1) the traditional approved method of calculation (total Medicare deaths divided by the total Medicare admissions) and; 2) adjusting for prior admissions by calculating the Medicare mortality rate only with each Medicare patient's last discharge diagnosis.

As in the past, Mercy Hospital will continue to take actions to ensure that the quality identified by the HCFA mortality data is maintained. Mercy Hospital is aware that AHA and Joint Commission on Accreditation of Healthcare Organizations, as well as other organizations, are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. Mercy Hospital is looking forward to the results of these efforts.

Sincerely,

Sister Mary Rene

Sister Mary René Mullen, R.S.M.
President

SMRM/slp

Attachment

-ATTACHMENT-

	① ALL MEDICARE ADMISSIONS		② LAST MEDICARE ADMISSION	
	CASES	MORTALITY RATE	CASES	MORTALITY RATE
ALL CAUSES	4063	7%	2894	10%
CA - CANCER	246	15%	181	20%
CE - CEREBROVASCULAR ACCIDENTS	70	41%	51	57%
EY - OPHTHALMOLOGIC DISEASE	23	0%	16	0%
GC - GASTROINTESTINAL CASTROPHES	129	13%	47	36%
GI - GASTROINTESTINAL DISEASE	360	3%	302	4%
GU - UROLOGIC DISEASE	226	2%	163	2%
GY - GYNECOLOGIC DISEASE	16	0%	11	0%
HL - LOW RISK HEART DISEASE	357	1%	251	1%
HM - HIGH RISK HEART DISEASE	277	12%	183	19%
HS - SEVERE CHRONIC HEART DISEASE	137	28%	95	41%
ME - METABOLIC/ELECTROLYTE DISTURBANCES	48	13%	34	18%
OP - ORTHOPEDIC DISORDERS	251	2%	194	2%
PN - PULMONARY DISEASE	371	14%	256	20%
RN - RENAL DISEASE	21	19%	15	27%
SE - SEPSIS	90	18%	64	25%
TR - SEVERE TRAUMA	114	4%	91	5%
UN - ALL OTHER CONDITIONS	1327	3%	940	4%

SMRM/slp
10-27-87

Mercy Hospital
OF TIFFIN
485 W. Market Street, P.O. Box 727
Tiffin, Ohio 44883-0727

OCTOBER 23, 1987

WILLIAM L. ROPER, MD
ADMINISTRATOR
HEALTH CARE FINANCING ADMINISTRATION
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Dear Dr. Roper:

Mercy Hospital of Tiffin, Ohio (#360089) has reviewed the 1986 Medicare Mortality Data provided by HCFA.

HCFA included 983 cases in the data sample, however, Mercy's data shows these patients accounted for approximately 1663 discharges. Mercy suggests the denominator for this study should comprise the total inpatient hospital activity of the population truly at risk, and not only the last hospitalization. Utilizing this premise, the study's Medicare Mortality Rate for the hospital would be 6.6%, compared to HCFA's 11%, which is below the lowest limit of the range of predicted mortality rates.

The most recent hospitalizations for two patients were excluded from the study accounting for 79 deaths at the time of discharge, not 77 as reported, only two post hospital discharge deaths could be verified. An incorrect discharge date was recorded for one patient.

Data review, using HCFA's report shows the hospital had no deaths in diagnostic categories pertaining to ophthalmologic disease, gynecologic disease, orthopedic disorders, or renal disease, mortality rates in all other diagnostic categories were within the predicted mortality ranges and frequently below or at the median point of the range.

In some cases, utilizing the total inpatient experience of the Medicare population, the mortality rate would be reduced further, this includes sepsis-Mercy 19% based on 21 discharges versus HCFA's 33% based on 12 cases; cerebrovascular accidents-Mercy 20% based on 44 discharges, HCFA reported 32% (which should be 29%) based on 31 cases; metabolic/electrolyte disturbances-Mercy 10% for 41 discharges versus HCFA 16% for 25 cases; and pulmonary disease-Mercy 13% for 96 discharges versus HCFA 16% for 82 cases.

Out of 110 mortalities quoted by HCFA 26 of the patients requested that no heroic measures be taken.

Use of the HCFA data model to predict mortality rates for any hospital is limited since the sample is skewed toward the elderly portion of the population. The median age range of patients included for Mercy Hospital is 80 to 84 years. The average age was 79.7 years.

Mercy Hospital
OF TIFFIN
485 W. Market Street, P.O. Box 727
Tiffin, Ohio 44883-0727

Since the majority of Medicare beneficiaries are 65 and older, the data does not constitute a fair sample for generalized projections or as predictors of hospital performance, as the likelihood of death increases with age.

If you have questions about our comments please contact John A. Cosco, PH.D, Senior Vice President, at (419) 447-3130 extension 2282, who had responsibility for the coordination of the review of your materials and the comments.

Mercy Hospital appreciates receiving this information and the opportunity to provide comments.

Sincerely,

Sister Marie Catherine Wise, RSM
SISTER MARIE CATHERINE WISE, RSM
PRESIDENT

bas

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	6	7	7	6
CE -- Cerebrovascular Accidents	6	3	6	3 (1 verified)
GC -- Gastrointestinal Catastrophes	5	0	5	0
GI -- Gastrointestinal Disease	1	1	2	0
GU -- Urologic Disease	1	1	1	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	3	0	3	0
HM -- Severe Chronic Heart Disease	16	9	16	9
HS -- Severe Acute Heart Disease	18	0	18	0
ME -- Metabolic/Electrolyte Disturbances	1	3	1	3 (1 verified)
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	8	5	8	5
RN -- Renal Disease	0	0	0	0
SE -- Sepsis	4	0	4	0
TR -- Severe Trauma	1	2	1	2
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	7	2	7	2
Total -- All Categories	77	33	79	* 31

* 2 of 31 deaths reported as post hospital could be verified.

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Medical
College
Hospitals

Office of the Executive Director

419-381-4172

419-381-3411

Medical College Hospitals
Medicare Provider #36-0048

3000 Arlington Avenue
Mailing Address: C.S. 10008
Toledo, Ohio 43699

October 27, 1987

William Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, MD 21207

Dear Doctor Roper:

This is written in response to your letter regarding the public release of 1986 Mortality Data. The Medical College of Ohio Hospitals is a 319 bed, tertiary care, medical school hospital. We provide inpatient and outpatient primary care, as well as many highly specialized services such as kidney transplantation, intra-operative radiation therapy, pediatric and adult cardiac surgery and a comprehensive rehabilitation program. The hospital serves as a major referral center for the areas of Northwest Ohio, Southeast Michigan, and Northeast Indiana. More than 50% of our patients are referred or transferred by physicians outside of Lucas County.

The hospital's medical staff is comprised of over 300 full time physicians and other health care practitioners. In addition, the hospital employs 120 Resident Physicians in training. This staff, our Board of Trustees, employees, and administration maintain a strong commitment to the provision of high quality patient care, as well as education and research. We believe that our ongoing quality assurance activities provide for comprehensive monitoring of all aspects of patient care. As part of this process, the medical staff conducts an intensive review of the medical record of every patient who expires. This ongoing peer review process is an integral part of the monitoring of medical practices at our hospital.

With this introduction to the Medical College Hospitals as background, I would now like to address the HCFA mortality data report. The initial response upon receiving the data was to re-review the records of all deaths included in the report. This analysis was coordinated by the Physician Medical Director of the hospital and involved the quality assurance department staff.

Each Medicare patient in the report was verified as being treated at our hospital. Except for a few minor errors in admission and discharge dates, patient age, and date of death, the data regarding the number of deaths is accurate. However, a major discrepancy in the total number of Medicare patients treated (1,271) and the actual number, as verified by our records (1,445) exists. This is after adjusting for all readmissions. This fact reveals a 12% error rate in the statistics which significantly distorts all of the mortality rate calculations. By using the accurate number of patients, the overall mortality rate figure is 10.9% instead of 13% as indicated in your report.

As you know, the HCFA mortality data were grouped into 16 diagnostic categories. We exceeded the predicted range in only one (1) of the categories, and by only 1%. We were surprised to have exceeded the predicted range, but after analyzing our cases, a major concern arose relating to the methodology HCFA used to define the diagnostic categories. We cite as an example of the methodology limitations, the mortality rate listed for category HL (Low Risk Heart Disease). The Medical College Hospitals' 13 mortalities out of 104 cases in this category included the following case which we feel would not be classified as "Low Risk" by a prudent physician:

> A male patient, over age 85, suffered an unobserved cardiac arrest at home and was brought to our facility in full cardiopulmonary arrest. He expired 16 hours later.

In addition, we found several examples of cases in which factors clearly outside the control of the patient's physician resulted ultimately in mortalities. These cases were inappropriately determined by HCFA to be the Medical College Hospitals' responsibility. Three illustrative cases are as follows:

> After a one day stay at the Medical College, a male patient, over age 70, was transferred to a nearby Veteran's Administration hospital at the request of the VA Administration. He expired at the VA Hospital.
>
> A male patient, over age 60, left the hospital against medical advice even though urgent coronary bypass surgery was recommended. All efforts to convince the patient of imminent danger if he left the hospital were futile. The patient expired outside of the hospital later that day.
>
> A female patient, over age 75, was transferred to a nursing home alive because the family would not consent to appropriate diagnostic and therapeutic measures in the hospital. The patient died eight days later in the nursing home.

Our careful review also revealed additional cases within this category where the classification as "Low Risk Heart Disease" is highly questionable. If, however, we were to recalculate the mortality rate for this category after excluding just the four examples cited above, the mortality rate is 9%, well within the predicted range.

Finally, we would like to caution against interhospital comparisons of the mortality data and against using these mortality data as a quality indicator. We agree with the statement in your letter dated September 21, 1987 as follows:

> *". . . HCFA will make clear that the information on its own is not a complete measure of the quality of care at an individual hospital. While we [HCFA] believe that information on hospital mortality rates is useful, until we [HCFA] have developed additional statistical measures to deal with complex issues such as severity of illness, we [HCFA] cannot and do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals."*

In closing, I would like to emphasize the importance placed on the assurance of quality patient care at the Medical College Hospitals. We do not interpret the HCFA data to be a positive or a negative reflection of the quality of patient care in our hospital. Rather, the data and our review process reflects that we have a continued commitment to monitor our care and the services we provide.

Thank you for this opportunity to respond to the HCFA Mortality Report.

Sincerely,

David J. Kolasky
Executive Director

tmz

U.S. HEALTH Corporation of Southern Ohio

One Health Place☐P.O. Box 1224☐Portsmouth, Ohio 45662☐Telephone: (614) 354-5000

Dallas K. Larson, President

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Mercy Hospital, Portsmouth, Ohio 45662
Hospital #36002

Dear Dr. Roper:

In response to the Medicare Mortality Data supplied by the Health Care Financing Administration, Mercy Hospital finds the information to be incorrect. Please refer to the attached two page Mercy Hospital memorandum which provides corrected data for certain of the deaths noted.

Our findings are based strictly on the HCFA methodology. We concur with the general consensus that the methodology is flawed. We particularly note the failure to include risk factors and severity of illness as predictive variables.

The mortality rates reported for Mercy Memorial do not reflect the degree of excellence we have achieved in health care delivery. It should be noted that Mercy Hospital received regional referrals and is a major provider of inpatient care for the terminally ill. Consequently, our case mix includes many terminally ill, high risk, critically ill patients from throughout our service area.

We would also comment that mortality data is only one of many factors to be considered in the evaluation of the quality of care delivered in any health care facility. We cannot, and do not, recommend the use of mortality rates for making judgements about the quality of care in an individual hospital or for making comparisons among hospitals.

Sincerely,

Dallas K. Larson
President

DKL:bb

Mercy Hospital☐Olde Market Square☐Scioto Memorial Convalescent Center☐Scioto Memorial Hospital☐Southern Hills Hospital
A Subsidiary of U.S. HEALTH Corporation, Columbus, Ohio

MERCY HOSPITAL
PHONE 1-614-353-2131
1248 KINNEYS LANE
PORTSMOUTH
OHIO
45662

MEMORANDUM

TO: Jim Weems

FROM: Krisa Cooper, RRA KC
Director, Medical Records

DATE: October 15, 1987

SUBJECT: HCFA Mortality Statistics

There were 215 deaths included in the mortality statistics for Mercy Hospital.

The breakdown of deaths is as follows:

CA - 24
CE - 14
GC - 6
GI - 11
GU - 2
HL - 5
HM - 25
HS - 34
ME - 10
OP - 3
PN - 46
RN - 6
SE - 9
TR - 2
UN - 18
Total 215

Of the 215 deaths included, there were 31 deaths listed as occurring outside of Mercy Hospital.

Of the 31 deaths, 10 patients actually did expire at Mercy Hospital and the date of death given by HCFA is in error:

	Actual date of death	HCFA date of death
[redacted]	11/20/86	11/30/86
[redacted]	6/5/86	6/6/86
[redacted]	1/17/86	1/31/86
[redacted]	11/29/86	11/30/86
[redacted]	9/5/86	9/7/86
[redacted]	12/14/86	12/31/86
[redacted]	4/7/86	4/9/86
[redacted]	10/30/86	10/31/86
[redacted]	2/16/86	2/28/86
[redacted]	1/6/87	1/6/87 *should not be included with 1986 data.

The other 184 deaths did occur at Mercy Hospital. Other than a few errors in ages listed by HCFA as compared to the Medical Records, the data was correct as published.

MVH **Miami Valley Hospital**
One Wyoming Street 513/223-6192
Dayton, Ohio 45409-2793

Office of the President
and Chief Executive Officer

October 27, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

RE: HCFA Mortality Information

Dear Dr. Roper:

Miami Valley Hospital has reviewed the mortality statistics provided in the Health Care Financing Administration report of September 21, 1987, and finds the data substantially in agreement with ours.

In keeping with the guidelines that permit us to add a statement for publication in the Federal Register with our mortality statistics, we request the following be inserted:

> "Miami Valley Hospital is a 772-bed, not for profit, tertiary healthcare facility that provides Level I trauma and air ambulance service to the southwest Ohio area, and serves as a regional referral center for kidney dialysis and transplantations, oncology and adult burn treatment."

Sincerely,

Karl R. Tague

Karl R. Tague
President and
Chief Executive Officer

wdb
Enclosure

MIDDLETOWN
REGIONAL HOSPITAL

MIDDLETOWN REGIONAL HOSPITAL
Middletown Ohio
360076

HCFA Mortality Data
Interpretive Remarks and Corrected Data

The Health Care Financing Administration has established a predicted mortality rate for hospitals (both overall mortality and mortality within specific disease categories).

Based on corrected data, Middletown Regional Hospital's mortality rates are within the predicted range in all categories.

(The original HCFA data showed the hospital to be outside the range of predicted mortality rate in one (1) category. After correcting errors in the data, however, the hospital's rates are in the predicted range in all categories).

The hospital's overall mortality rate of 12% is approximately in the middle of Medicare's predicted rate of 8 to 15%. Similarly, in all cases, the hospital's mortality rate for specific categories of diseases is within predicted levels. These include "diagnostic categories" such as heart disease, stroke, cancer, respiratory disease, severe trauma/accident.

Middletown Regional Hospital carefully reviewed the charts of all Medicare patients who died in 1986. The review was conducted, on a case-by-case basis, according to Medicare standards. Errors in the original data supplied by the Health Care Financing Administration (Medicare) were corrected.

Overall Mortality Rate

The original HCFA data indicated 298 patients admitted to Middletown Regional Hospital died within 30 days of admission in 1986. The correct figure is 296 patients (the discrepancy occurred because two patients were transferred to other hospitals and should not have been included in Middletown Regional Hospital's data). This is a small discrepancy and did not affect the hospital's overall mortality rate.

Mortality Rates for Disease Categories

The HCFA data assigned patients to one of 16 categories based on their primary reason for being admitted to the hospital (these are called diagnostic categories and are not necessarily the cause of death). In 13% of the cases, patients had been incorrectly categorized in the HCFA data. The data below shows actual mortality rates for each diagnostic category based on the corrected data.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

MIDDLETOWN REGIONAL HOSPITAL
Corrected Data

Diagnostic Category	Cases	Actual Mortality Rate (corrected)	Range of Predicted Mortality Rates
ALL CAUSES	2,396	12%	8 to 15%
CA-Cancer	158	18%	15 to 32%
CE-Cerebrovascular Accidents	74	22%	18 to 39%
EY-Ophthalmologic Disease	10	0	0 to 100%
GC-Gastrointestinal Catastrophes	43	16%	8 to 34%
GI-Gastrointestinal Disease	242	7%	3 to 10%
GU-Urologic Disease	116	7%	2 to 13%
GY-Gynecologic Disease	27	0	0 to 86%
HL-Low Risk Heart Disease	160	3%	2 to 9%
HM-Severe Chronic Heart Disease	143	28%	17 to 32%
HS-Severe Acute Heart Disease	81	49%	28 to 51%
ME-Metabolic/Electrolyte Disease	35	23%	8 to 36%
OP-Orthopedic Disorders	166	1%	0 to 6%
PN-Pulmonary Disease	243	24%	13 to 25%
RN-Renal Disease	29	21%	8 to 45%
SE-Sepsis	29	34%	22 to 59%
TR-Severe Trauma	95	8%	3 to 16%

Additional Interpretive Data

1. Of Middletown Regional Hospital patients included in the HCFA data, 90% had co-morbid conditions -- they had other illnesses or conditions that contributed to their death (an example is a patient with cancer, but also suffering heart and kidney failure). A total of 25% had 5 or more co-morbid conditions or illnesses. (Based on Middletown Regional Hospital data).

2. Under the category of "severe acute heart disease", 92% of patients had co-morbid conditions. Almost 60% had three or more co-morbid conditions. Of the patients in this category, 43% were 80 years old or over (based on Middletown Regional Hospital data). Patients included in this category include, not only those suffering heart attack (myocardial infarction), but also those suffering cardiac arrest, ruptured aortic aneurysm (either in the abdomen or chest), and cardiogenic shock when admitted.

3. Under the category of "pulmonary disease", 98% of patients had co-morbid conditions. A total of 70% had three or more co-morbid conditions. Of the patients in this category, 40% were 80 years old or over (based on Middletown Regional Hospital data).

4. Middletown Regional Hospital has an excellent quality assurance program that provides mortality data. The overall hospital mortality rate for patients of all ages (not just those with Medicare) is approximately two and one-half (2 1/2).

5. If a patient was admitted to the hospital more than once in a year, the HCFA data counted it as only one admission. The data did not count repeat admissions, which are common for Medicare patients. If all admissions are counted (one time admissions and repeat admissions), the overall mortality rate for Medicare patients at Middletown Regional Hospital drops to 6%.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	20	6	24	5
CE -- Cerebrovascular Accidents	11	5	11	5
GC -- Gastrointestinal Catastrophes	7	1	6	1
GI -- Gastrointestinal Disease	8	7	9	7
GU -- Urologic Disease	1	2	6	2
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	3	3	2	3
HM -- Severe Chronic Heart Disease	25	11	29	11
HS -- Severe Acute Heart Disease	45	4	37	3
ME -- Metabolic/Electrolyte Disturbances	4	1	7	1
OP -- Orthopedic Disorders	0	1	0	1
PN -- Pulmonary Disease	40	19	40	18
RN -- Renal Disease	6	0	6	0
SE -- Sepsis	10	4	6	4
TR -- Severe Trauma	2	6	2	6
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	31	15	31	13
Total -- All Categories	213	85	216	80

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Corrected Data

HOSPITAL = 360076 MIDDLETOWN HOSP ASSN MIDDLETOWN OH

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	CORRECTED	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	2,396	12 %	12%	8 TO 15 %
CA - CANCER	150	16 %	18%	15 TO 32 %
CE - CEREBROVASCULAR ACCIDENTS	74	22 %	22%	18 TO 39 %
EY - OPHTHALMOLOGIC DISEASE	10	0 %	0	0 TO 100 %
GC - GASTROINTESTINAL CATASTROPHES	43	19 %	16%	8 TO 34 %
GI - GASTROINTESTINAL DISEASE	242	6 %	7%	3 TO 10 %
GU - UROLOGIC DISEASE	116	3 %	7%	2 TO 13 %
GY - GYNECOLOGIC DISEASE	27	0 %	0	0 TO 86 %
HL - LOW-RISK HEART DISEASE	160	4 %	3%	2 TO 9 %
HM - SEVERE CHRONIC HEART DISEASE	143	25 %	28%	17 TO 32 %
HS - SEVERE ACUTE HEART DISEASE	81	60 %	49%	20 TO 51 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	35	14 %	23%	8 TO 36 %
OP - ORTHOPEDIC DISORDERS	166	1 %	1%	0 TO 6 %
PN - PULMONARY DISEASE	243	24 %	24%	13 TO 25 %
RN - RENAL DISEASE	29	21 %	21%	8 TO 45 %
SE - SEPSIS	29	48 %	34%	22 TO 59 %
TR - SEVERE TRAUMA	95	6 %	8%	3 TO 16 %

MORROW
COUNTY
HOSPITAL

651 West Marion Road
Mount Gilead, Ohio 43338
(419) 946-5015

October 27, 1987

William L. Roper, M.D., Administrator
Healthcare Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for giving us the opportunity to respond to the mortality data being released by HCFA for 308 Medicare patients treated in Morrow County Hospital during 1986. The data used by HCFA indicate that 49 deaths arose from these 308 cases listed in HCFA's categories for a 16% mortality rate. Of these, 25 were admitted from a nursing home, while 21 of these had physician signed "Do Not Resuscitate Orders". We found no discrepancies in the data for age, sex, date of admission, date of discharge, and date of death.

All deaths occuring during a stay at Morrow County Hospital are reviewed through our quality assurance mechanisms. While careful study of the data does not show any trends which raise particular concern, we are still using it as a mechanism to assist us in peer review.

The hospital's actual mortality rate falls well within or below the range of the predicted mortality rate in all of the categories. While we found no errors in the calculation of the mortality rates, we feel there are many factors influencing risk of death which were not taken into account. The reliability of the statistical model is unknown and its validity has not been determined.

Currently there are only 10 skilled nursing beds in Morrow County, and they are running at 100% occupancy. Therefore, many patients who develop problems in the nursing homes are admitted to the hospital. 51% of the Medicare deaths were patients admitted from the area nursing homes. 72% of the persons listed in your data had complicating and/or co-morbid conditions according to our review. I would like to reiterate that 43%, a significant number, requested that resuscitative measures not be initiated.

Again, while your data and our review do not reveal areas of particular concern, we will continue to monitor mortality data as one aspect of our quality review activities. We use mortality data principally as identification of areas for peer review and educational opportunities.

Beyond that, we feel that it is not appropriate as an indicator for comparative statistics and should not be used as the sole or principal indicator of quality among physicians and/or hospitals unless the statistical methods can be improved and multiple variables can be quantified.

Thank you again for the opportunity to review and comment on the data. We hope our comments have been responsive and informative.

Sincerely,

Randal M Arnett

Randal M. Arnett
Administrator

RMA/sn

MOUNT CARMEL HEALTH

793 WEST STATE STREET COLUMBUS, OHIO 43222 614-225-5000

COMMENTS ON THE HCFA MORTALITY DATA
MOUNT CARMEL HEALTH, COLUMBUS, OHIO
MEDICARE PROVIDER NUMBER - 360035

Mount Carmel Health supports the intention of the Health Care Financing Administration to assemble quality and performance related data that may identify potential areas for further evaluation. We are concerned, however, that predictive mortality rates compared to actual mortality rates may be inappropriate, since the analytic model does not identify all the important patient characteristics influencing mortality. The most urgent concern is that the model does not measure the severity of illness of patients, thus potentially impacting the validity of the data.

We have reviewed our 830 cases of "low-risk heart disease" and, in detail, the 54 patient deaths (6.506%) reflected in our "7%" actual mortality data. Over half of the 54 patients who died in this category had three or more additional illnesses such as diabetes, hypertension and congestive heart failure. The severely ill patient population at Mount Carmel is not surprising in view of Mount Carmel's wide geographic referral area and its position in the cutting edge of state-of-the-art invasive cardiology. (The first percutaneous transluminal balloon aortic valvuloplasty in Ohio was performed at Mount Carmel in 1986.)

Moreover, HCFA's analytic model counted only a patient's last hospital admission during 1986, excluding all previous admissions to any hospital within the year. Mount Carmel Health actually treated 1351 patients for "low-risk heart disease" during 1986. Based on this denominator, Mount Carmel Health experienced an actual mortality rate of 4%, well within HCFA's "predicted" range of mortality.

The medical staff of Mount Carmel Health routinely and judiciously performs internal quality review of its medical care. The priority our organization sets in providing high quality care to those we serve is reflected by our recent three year accreditation by the Joint Commission on Accreditation of Healthcare Organizations.

THE MT. SINAI
MEDICAL CENTER

One Mt. Sinai Drive
Cleveland, Ohio 44106-4198
216/421-3919

Robert J. Shakno
President

October 22, 1987

Hospital I.D. #36-0075

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

The Mt. Sinai Medical Center of Cleveland, Ohio is pleased to respond to the data released to us by HCFA. The opportunity to have comments published in concert with the release of these data to the public is appreciated.

We at Mt. Sinai are extremely pleased that our mortality data in all sixteen (16) categories fall within the HCFA range of predicted mortality. We point out that in two (2) categories our mortality rate fell below the predicted range, in eight (8) categories they fell below the mid-point of the range, and in six (6) categories well below the upper range. These data corroborate Mt. Sinai's significant efforts in the delivery of high quality health care to our patients.

Despite a degree of satisfaction with these results we are concerned with the publication of such data in general. Some key factors that could be reasonably expected to impact on any one patient's probability of death that were not included in HCFA's methodology include: 1) severity of illness; 2) the presence of significant underlying chronic conditions; and 3) the availability and quality of other health care resources in our area (e.g. nursing homes).

While attempting to verify the information supplied to us we noted the following:

a. In 97 of 315 cases the patient I.D. number did not coincide with Mt. Sinai's records.

b. After the first six (6) letters of patient surname were used, 30 patients remained unidentified.

Affiliated with Case Western Reserve University School of Medicine and The Jewish Community Federation

c. After other supplied data were used we were left with six (6) patients who cannot be identified as Mt. Sinai patients.

d. Information regarding 90 patients who died outside of Mt. Sinai has not yet been pursued.

Thank you once again for the opportunity of this reply.

Respectfully,

Robert J. Shakno
President

RJS:smk

The Northeastern Ohio General Hospital

October 26, 1987

Department of Health & Human Services
Health Care Financing Administration
6325 Security Boulevard
Baltimore, MD 21207

Re: Hospital ID #360171

Dear Dr. Roper,

The HCFA statistics of hospital mortality rates cannot be validly used as an indicator of the diagnosis leading to the cause of death due to limitations placed on the data.

Information contained in this report may be misinterpreted since the diagnostic category listed on the report reflects the reason the patient was initially admitted to the hospital. The reason for death is not always related to the reason of admission. There appear to be several cases listed on this report in an incorrect category. For example, cancer is on occasion the underlying disease process even though a patient may be admitted for a secondary condition. Additionally, utilizing statistics which reflect death within 30 days of admission does not account for those patients who died after discharge from a condition totally unrelated to the patient's admission. An example of this would be any patient dying from a traumatic, accidental death such as an automobile accident. This statistic is very misleading.

Of incidental note, Northeastern Ohio General Hospital performs 100% mortality review. A committee of physicians reviews every expiration from all aspects of care. The results of this review are used for educational purposes. This committee in its routine order of business utilizes the entire medical record for review and does not limit review findings to the principal diagnosis. It is our opinion that it is necessary to review all aspects for valid data.

Yours truly,

Neil Gilman

Neil Gilman
Administrator

NG:mj

2041 Hubbard Road / Madison, Ohio 44057 / (216) 428-2121 • an osteopathic hospital caring for its community

Oak Hill Community Medical Center, Inc.

350 CHARLOTTE AVENUE
OAK HILL, OHIO 45656
PHONE (614) 682-7717

October 1, 1987
Hospital #360050

Dear Sirs:

Please find enclosed comments and further specific information in regards to the Hospital Specific Mortality Rate Information received from your office September 21, 1987.

In reviewing the information, we find all of the 35 listed deaths to be factual, according to our records. There were noted to be three deaths which occurred after hospital discharge. We did find pertinent information in regard to these cases.

Case #1 found in HM category was known to have multiple recurring admissions for significant cardiac disease most often treated at a Veterans' Hospital, and known cancer with unknown primary. He was admitted with an episode of congestive heart failure and was receiving treatment. They were adamantly opposed to prolonging life as they were well acquainted with his prognosis. They subsequently signed out against medical advice.

Case #2 found in PN category was a Nursing Home resident with Parkinson's disease, noted to be in the last stages, admitted for Aspiration pneumonia, probably secondary to her related neurological disease. She was successfully treated and repeat chest X-ray cleared, and laboratory studies also returned to normal. She was returned to the Nursing Home improved but with extremely poor prognosis because of the aforementioned neuro disease and did subsequently die.

Case #3 found in GC category was a patient with known kidney cancer with metastasis to pelvis and lungs. Admitted with fecal impaction and vomitting, successfully treated and hydrated, he was transferred to our extended care facility for Hospice care where he subsequently expired.

It was also noted that of the 35 listed deaths, average age was eighty (80). We believe it should be documented as a significant risk factor of death.

In looking over the data several questions come to mind. Is the received format of information the same format in which it will be presented for publication or will the format change? When publication occurs, will HCFA offer any clarifying comments or comparative data? Such as compare or contrast of hospitals of same size, geographical regions or population draw in regards to medicare age % population? If further information is or becomes available in regards to publication criteria or format please remit for further review and/or comment.

Sincerely,

Jean Bellamy

Jean Bellamy, R.N.
Utilization Review

JB/sa

OVH OHIO VALLEY HOSPITAL
• One Ross Park
• Steubenville, Ohio 43952
• Area Code 614/283-7000

October 29, 1987

Health Care Financing Administration
Department Health and Human Services
Room 309-G, Hubert H. Humphrey Building
200 Independence Avenue, S.W.
Washington, DC 20036

Attention: Comments on Mortality

The major goal of the Ohio Valley Hospital Association, its Medical Staff, Administration, and Board of Trustees has been to deliver, in a caring fashion, effective and efficient health care to the community it serves.

In order to reach this goal, the Hospital has developed a comprehensive system for monitoring and evaluating the quality of the care that it delivers.

The assessment of mortality as an aspect of quality care is important; however, this is only one (1) indicator.

Although HICFA has made significant movement to improve its efforts to use mortality rates as a measurement of quality, we still do not really know what the report means and have not had a real opportunity to research the validity of HICFA's strategies and data analysis.

For years, we have been reviewing every single death that has occurred at our Hospital, whether Medicare or not. Ours has not been a statistical analysis. We have reviewed the medical record of each case individually and comprehensively. We have had opportunities to monitor the patients while they were still receiving their care at the Hospital. We have interviewed the specific health care professionals involved in the care of a particular case. We have presented the cases to health care professional peers for their comments and recommendations. When concerns have arisen, appropriate educational efforts were taken and, when necessary, disciplinary action.

Recently, in order to improve our monitoring and evaluation methodology, we have purchased a computerized system, MediQual (Jacob-Brewster), to measure the outcome of the health care we deliver, including among other things, mortality and morbidity of all patients. In order to be fair and more objective, this system has a severity of illness index built into it so that more valid comparisons can be made. This system enables us to compare our performance objectively to other hospitals as well as within our own departments of the Medical Staff and individual physicians. Our performance as a Hospital compared very well with the other hospitals in the system, including morbidity and mortality, for all age groups.

Unfortunately, we do not have access to the details of the system employed by HICFA in its analysis. Therefore, we cannot intelligently comment on the validity of the system. For instance, we presently do not have the means to gather information relating to the patients' outcome after they have been discharged from the Hospital. More importantly, in addition to the fact that we may not know if the patient has survived 30 days after admission, we also do not have the ability to gather facts regarding the events that occurred after discharge. We cannot determine what was the impact of the care the patients receive in a hospital and what was the impact of the care that he received after discharge. We agree that the care patients receive in the Hospital and the discharge plans made for them have an important impact on what subsequently happens to the patient, but common sense also tells us that the care that patients receive outside of the Hospital, in which the Hospital cannot play any substantial role, is vitally important also. In approximately 19 percent of the mortalities attributed to our Hospital, the death occurred outside the Hospital.

Even though we have reservations as expressed above, we are pleased to note that our performance, both overall and in the specific diagnostic categories, fell within the range of predicted mortality rates.

Sincerely,

OHIO VALLEY HOSPITAL ASSOCIATION

Dominic A. Brancazio, M.D.
Vice President, Medical Affairs

DAB/jm

Our Lady of Mercy Hospital

Anderson-Five Mile and State Rd.
Mariemont-Rowan Hills Drive

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

We are in receipt of the HCFA data which was forwarded to us in the later part of September. I would like to submit the following comment to be included in the December publication:

> "It should be noted that Our Lady of Mercy Hospital is within or below the predicted mortality range in all of the listed diagnostic categories. In addition, Our Lady of Mercy Hospital is well below the mean in 14 of the 16 listed categories."

I would like to comment on the accuracy of the data. I did find a mistake relative to the patient listing for Our Lady of Mercy Hospital. [redacted], [redacted] is listed as a patient who expired at Our Lady of Mercy Hospital on July 10, 1986. We have no record of this individual in our files. In your listing, a patient by the name of [redacted] has the identical number and death data as quoted for [redacted] [redacted] was a patient who was admitted and died at Our Lady of Mercy Hospital. [redacted] was not a patient in our facility.

The contact person for our hospital is Helen Balush, Vice President, Public Affairs. She may be reached at the hospital address or by telephone at (513) 527-5517.

Sincerely,

Sister Margaret Schwab, rsm

Sister Margaret Schwab, RSM
Vice President

mfc

Mailing address: Rowan Hills Drive, Cincinnati, Ohio 45227

Parkview Hospital
An osteopathic institution
1920 Parkwood Ave./Toledo, Ohio 43624 / (419) 242-8471

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RE: HCFA Mortality Data, Parkview
Hospital,Medicare Provider #36-0119

Dear Dr. Roper:

Thank you for the opportunity to comment upon the selected mortality information for hospitalized Medicare patients in 1986. Quality patient care is the major goal of the medical staff, management and governing board of Parkview Hospital as evidenced by our medical staff's on-going review of all mortalities and an aggressive quality assurance program.

Even though the Health Care Financing Administration presented each hospital's Medicare mortality rates by diagnostic category, these rates should not be construed as quality indicators because they do not indicate severity of illness, do not include complicating risk factors, and do not indicate other extenuating circumstances as in our cancer patients.

Overall, for all causes, Parkview Hospital was well within the range of predicted mortality rates. In 14 of the 16 specific diagnostic categories, Parkview Hospital was either below the range or well within the range of the HCFA predicted mortality rates. The other two diagnostic categories -- cancer and cerebrovascular accidents (stroke)--were within just two percentage points of the range of the HCFA predicted mortality.

Upon reviewing the charts of patients listed in the HCFA data as having cerebrovascular accidents (stroke), it was found that two patient deaths clearly should not be listed in this diagnostic category. One death should be shown as anoxic brain damage (ICD-9-CM Code 348.1) and the other as a traumatic intracranial cerebellar hemorrhage (ICD-9-CM Code 853.0). Deleting these two cases would reduce this hospital's cerebrovascular accident mortality rate to within the predicted mortality range. It should also be noted that in three other cases listed in this category, CVA (stroke) was not the primary cause of death.

For 9 of the 19 Medicare patients who died of cancer, they and/or their families preferred that no aggressive therapy be performed since the patients were considered terminal or, at the time of admission, were rapidly deteriorating. Our physicians are trained to be compassionate and caring. They agreed with these patients and their families that quality of life was more important than medically heroic efforts which might extend their life. Instead, using the hospice-type approach, they concentrated their efforts toward preserving the patients' comfort and dignity until death.

Thank you for allowing us to respond to our hospital's statistics included in HCFA's planned national publication of selected mortality information on Medicare patients hospitalized during 1986. Correcting the CVA (CE) category data in this report will be appreciated. Should you desire documentation in this matter, please advise.

Be assured that Parkview Hospital has always established quality care as its primary objective. This data, indeed all data, is utilized for on-going review in accredited hospitals in the United States to assure quality care. We are pledged to this goal.

Sincerely,

PARKVIEW HOSPITAL-OSTEOPATHIC

Bernhardt A. Zeiher, FCOHE, FACHE
President/CEO

BAZ/ema

Parma
Community
General Hospital

October 26, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

We have reviewed the 1986 mortality data submitted by the Health Care Financing Administration and submit the following:

1. Attachment A details error corrections made during our review of these data. We submit these corrections for your information.
2. Please be advised that Parma Community General Hospital has an ongoing mortality review process as a portion of its quality review program. The HCFA data will be utilized to augment this program.

Thank you for the opportunity to comment.

Sincerely,

Bernard J. Schlueter

Bernard J. Schlueter
Administrator/C.E.O.

BJS:sar
cc: File

Signed in my absence to avoid delay.

7007 Powers Blvd. • Parma, Ohio 44129-5495 • (216) 888-1800

ATTACHMENT A

CORRECTION LOG

PT. I.D. NO.	SURNAME	DIAGNOSTIC CATEGORY	AGE	ERROR	CORRECTION
[redacted]	[redacted]	CE	88	Expired in hospital 6/19	Discharged alive SNF 6/19
[redacted]	[redacted]	CE	73	Expired outside hospital 8/2	Expired in hospital 8/1
[redacted]	[redacted]	CE	66	Expired outside 8-31	Expired in hospital 8/20
[redacted]	[redacted]	GI	59	Admission 10/31 Discharged 11/17 Expired outside 8/22 diagnosis 5528	Admission 11/18 Expired in hospital 11/22. Principal diagnosis CHF not GI
[redacted]	[redacted]	GI	96	Expired outside 11/21	Expired in hospital 11/20
[redacted]	[redacted]	HM	61	Expired in hospital 12/20	Expired in hospital 12/21
[redacted]	[redacted]	HS	99	Expired outside 3/4	Expired in hospital 3/3
[redacted]	[redacted]	HS	50	Expired in hospital 9/29	Transferred to another facility 9/29 - died same day
[redacted]	[redacted]	TR	93	Expired outside 12/31	Expired in hospital 12/26

pch

October 23, 1987

Department of Health & Human Services
Healthcare Financing Administration
Administrator
Washington, D.C. 20201

Dear Sir:

I am responding to the HCFA mortality information concerning Pike Community Hospital (I.D. #: 360047).

First, I am writing to correct the statistics mailed to us in September after review by the Medical Records Department. Unfortunately I must report that the number of Medicare patients admitted to PCH and who died within 30 days of their last admission in 1986 is higher than the statistics presented to us. Please add these numbers to the appropriate diagnostic category.

Cancer (CA) - 1

Cerebral Vascular Accidents (CE) - 1

Gastro-Intestinal Disease (GI) - 1

Severe Acute Heart Disease (HS) - 1

Metro-Bolic/Electrolytes Disturbances (ME) - 1

Pulmonary Disease (HS) - 6

Renal Disease (RN) - 1

Ethically, we must report this complete data; however, it is difficult to do so. Of course our goal is to provide the most accurate data and we owe this commitment to our patients. Identifying these errors this year will also prevent us from appearing to have tremendous increases in each category next year when the correct date would be reported.

Please do not include the above statements in the 1987 published directory. Please do include the following statements:

Pike Community Hospital - 100 Dawn Lane - Waverly, Ohio 45690

"Mortality Cases and Actual Mortality Rates are based on Medicare Recipients who died within 30 days of hospital admission. Of this subset, 15% died after being discharged from the hospital to appropriate setting in a nursing home or homecare alternative.
A significant percent of this subset was transferred to Pike Community Hospital after acute care at another facility to receive terminal care close to home."

Please feel free to contact me if you require any additional information or any clarification.

Sincerely,

Don J. Sabol

Don J. Sabol
Administrator

DJS/jc

624 PARK AVENUE, PIQUA, OHIO 45356
PHONE (513) 778-4600

PIQUA MEMORIAL
MEDICAL CENTER

Upper Valley
Medical Center

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: Mortality Information
Medicare Provider #: 360149

Dear Sirs:

The data used by HCFA indicates that a total of 132 Medicare patients admitted to Piqua Memorial Medical Center died within 30 days of admission. Of these, 111 died while still a patient of the hospital and 21 died after discharge.

Our own records indicate 115 died while hospitalized and 17 died after discharge. Attached is our corrected list.

If you have any questions regarding the above, please feel free to contact my office.

Sincerely,

Eva L. Fine
Acting Campus Administrator

EF/mkr

Enclosures

cc: Sarah Grim, Greater Dayton Area Hospital Association

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

PIQUA MEMORIAL MEDICAL CENTER

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	12	2	12	2
CE -- Cerebrovascular Accidents	14	2	14	2
GC -- Gastrointestinal Catastrophes	3	0	3	0
GI -- Gastrointestinal Disease	1	0	1	0
GU -- Urologic Disease	3	1	3	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	1	1	1	1
HM -- Severe Chronic Heart Disease	24	3	25	2
HS -- Severe Acute Heart Disease	16	2	17	1
ME -- Metabolic/Electrolyte Disturbances	1	2	1	2
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	20	3	21	2
RN -- Renal Disease	2	0	2	0
SE -- Sepsis	1	0	1	0
TR -- Severe Trauma	2	1	2	1
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	11	4	12	3
Total -- All Categories	111	21	115	17

October 23, 1987 Prepared by: Renee Robbins, CPQA, QA Coordinator

---

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Potters Medical Center pmc
332 West Sixth Street East Liverpool, Ohio 43920 216-386-5003

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human
Services
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Upon reviewing the mortality information on Medicare patients, the only comments I wish to make regarding our facility is as follows:

> The third patient listed on the print-out has an incorrect patient I.D. number. It should read [redacted] and also the date of death is 04/05/86, not 04/07/86.

Please contact my office if further information is needed.

Sincerely,

Betty Woodward

Betty Woodward
Associate Administrator

BW/baa

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Providence Hospital
2446 Kipling Avenue
Cincinnati, Ohio 45239

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

To Whom It May Concern:

Enclosed are pertinent comments in reference to HCFA's mortality statistics due for release on December 1, 1987.

It is our understanding that these comments will be made available in conjunction with this data.

We appreciate the opportunity to offer this overview of our data.

Sincerely,

Allen Zobay

Allen J. Zobay, M.D.
Vice President of
Medical Affairs

AJZ/ldn

enclosures

FRANCISCAN HEALTH SYSTEM OF CINCINNATI

PROVIDENCE HOSPITAL'S COMMENTS PERTAINING TO HCFA MORTALITY RATE REPORT

Providence Hospital of Cincinnati, Ohio has conducted an extensive analysis of its portion of the Hospital Specific Mortality Rate Report released by the Health Care Financing Administration in December, 1987. While Providence Hospital's overall mortality rates fall well within the acceptable range, certain inconsistencies may invalidate the significance of the data for the entire report. HCFA states they consider "age, sex, admitting diagnosis, whether the patient had previous hospital admission(s) and/or was transferred, and the presence or absence of selected comorbidities (other significant illnesses)." However, the admitting diagnosis is not always the cause of death and the principle diagnosis does not always relate to HCFA's categories. Selected comorbidities are undefined but have significant bearing on the severity of illness. And the age of the patient is listed only as a demographic reference. The following discussions present facts obtained through the analysis of the Providence Hospital data.

First, the report separates the deaths into sixteen categories using the principal diagnosis. The principal diagnosis is the reason, after study, resulting in the patients admission to the hospital. In the category of Severe Trauma, Providence's report contains 16 deaths. Thirteen (13) of the sixteen (16) listed had an admitting diagnosis of fractured hip. However, in each case, the cause of death was not a fractured hip but a comorbid condition (another significant illness, for example, a heart attack or stroke.) Another consideration in this category is the title - Severe Trauma - which implies multiple injuries, possible automobile accidents. Yet, none of the patients listed in the category sustained "severe trauma." Because HCFA allocated one category just for orthopedic conditions, 13 of the 16 cases in the Severe Trauma category should be redistributed to the Orthopedic Disorders category.

Second, the principal diagnosis does not always relate to the category. As previously noted, 13 of the 16 cases listed under Severe Trauma were actually orthopedic disorders. Under Severe Acute Heart Disease, four in the category were admitted and died because of ruptured abdominal aortic aneurysms, unrelated to severe acute heart disease. Another example comes from the Cerebrovascular Accidents (CVA) category. Two patients are listed who did not suffer from a CVA; one had an abdominal aortic aneurysm and the other suffered from diabetes mellitus and congestive heart failure.

To further question the validity of the data, Providence attempted to analyze HCFA's use of comorbidities but found no correlation to the statistics. What we did find was a significant percentage of all patients listed had at least one comorbidity (another significant illness) and many had several. In the category of Severe Trauma, 16 of the 16 cases listed all had three or more significant comorbidities, like end stage renal disease, congestive heart failure, or pulmonary embolism. In the category of Severe Acute Heart Disease, 17 of the 39 had 2 or more preexisting comorbidities. The significance of comorbidities is that they show how severely ill the patient was. The more comorbidities, the higher the severity of illness.

Finally, the significance of age should not be overlooked. Of the 300 cases listed by HCFA for Providence, 46% of the patients were eighty years of age or older. Many of the patients and families chose to not sustain a painful existence. Those cases are listed among our statistics as well, but have no bearing on the quality of our care.

In summary, HCFA has undertaken the monumental task of attempting to ascertain the quality of care by reviewing each hospital's mortality statistics. As these statistics will be available to the public, it is imperative the information be valid and clearly understandable to the non-medical person. Unfortunately, Providence has found several examples of invalid statistics from as simple as an incorrect age to as severe as an incorrect category for a specific diagnosis. And because it is unclear how some diagnoses were arbitrarily placed in one category versus another (fractures hips in Severe Trauma versus Orthopedic Disorders), the information is unclear and difficult to understand. If this is true of one hospital, the probability increases the likelihood of this analysis for other hospitals. Therefore, instead of providing a measure of quality, the HCFA Mortality Report will more likely provide confusion and damage to the reputations of the health care providers.

RHGH
An Osteopathic Institution

Richmond Heights
General Hospital
27100 Chardon Road
Richmond Heights, Ohio 44143
(216) 585-6500

NICHOLAS W. ZINNI
President
Chief Executive Officer

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Richmond Heights General Hospital
I.D. #360162

Dear Sir:

Our Hospital, in verification of the HCFA data, indicates that an actual total of 1584 Medicare beneficiaries were treated at Richmond Heights General Hospital in 1986. Of these, 162 Medicare patients died within 30 days of admission. Of this total, 136 died while still a patient, while 26 died after discharge. It is impossible to determine the percentage of the 26 patients dying after discharge because we have no access to death certificates. We agree with your recommendation that the personal, private side of death is best left that way. However, it is important to note that we decrease to the 10% range of accepted mortality rate.

In reviewing the methodology used by HCFA, we feel it is frequently more appropriate to use the secondary diagnosis to determine the actual cause of death. Based upon chart reviews, death is frequently attributed to a complication or coromobidity which is found with in the secondary diagnosis.

Our hospital, under the approved support of the Board of Trustees, management and medical staff, continually monitors and evaluates quality and appropriateness of medical care on a daily basis through the Quality Assurance Program. This program evaluates patient care and clinical performance on all levels ensuring quality medical and professional activity.

We agree with HCFA in their mission to improve the measurement of quality of care and for consumers to be

"WHERE MEDICINE IS STILL A PERSONAL EXPERIENCE"

more informed regarding their health care. The American Hospital Association and other organizations including the American Osteopathic Hospital Association, the Joint Commission on Hospital Accreditation also continue to evaluate and investigate hospital quality in an effort to monitor the appropriateness of health care for all citizens.

Sincerely,

N.W. Zinni

Nicholas W. Zinni
President and
Chief Executive Officer

NWZ:tc

cc: file

RIVERSIDE HOSPITAL

A RIVERSIDE HEALTH GROUP MEMBER

October 7, 1987

William Raper, M.D.
HCFA
6325 Security Rd.
Baltimore, MD 21207

Dear Dr. Raper:

I would like to make the following comments on the 1986 mortality data for Medicare recipients:

- A full surname and first initial would be helpful in locating patient's medical records for confirmation.
- The significance of ICD-9-CM Codes for principal diagnosis and principal procedures cannot be appreciated without the use of appropriate references.
- Medical and surgical cases are not discriminated except for the use of ICD-9-CM.
- The diagnostic categories are too broad to be of much value especially if the ICD-9-CM data is not translated.
- In deaths occurring post discharge, the report implies that the cause of death and the principal diagnosis at discharge are the same.

The data was reviewed to determine if the patient had been admitted and if the date of death was accurate. One patient in category HM was not admitted to our facility. The date of death was recorded incorrectly in six cases. The data under diagnostic category and principal diagnosis/procedure were not verified through medical record review.

I hope that the application and limitations of this report will be considered by those who refer to this information.

Sincerely,

Marlene Koskela

Marlene Koskela
Director Quality Review

MK;vm

Riverside Hospital
1600 North Superior Street
Toledo, Ohio 43604
Telephone 419 729-6000

RIVERSIDE
METHODIST
HOSPITALS

Erie Chapman, J.D.
President and
Chief Executive Officer

3535 Olentangy River Rd.
Columbus, Ohio 43214
(614) 261-5000

October 22, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper

In response to the Medicare mortality data supplied by the Health Care Financing Administration (HCFA), Riverside Methodist Hospital finds the information to be incorrect in several parameters. For example, our validation study confirmed an overall mortality rate of only 9%.

Our findings are based strictly on the HCFA methodology. We concur with the general concensus that the methodology is flawed. We particularly note the failure to include risk factors and severity of illness as predictive variables.

Although the mortality rates reported for Riverside Methodist Hospital do not raise any quality issues, they also do not reflect the degree of excellence we have acheived in healthcare delivery. It should be noted that Riverside Methodist Hospital is a tertiary care referral center for a multi-hospital system with a mobile intensive care unit, helicopter and fixed wing transport system. Consequently, our case mix includes the most severely ill, highest risk patients from throughout our large service area.

We would also comment that mortality data is only one of many factors to be considered in the evaluation of the quality of care delivered in any healthcare facility. We cannot and do not recommend the use of mortality rates for making judgments about the quality of care in an individual hospital or for making comparisons among hospitals.

Sincerely

Erie Chapman

Erie Chapman, J.D.
President and Chief Executive Officer

EC/jw

Riverside, the flagship of U.S. Health Corporation of Columbus, also includes:

- *The Elizabeth Blackwell Center and Hospital*
- *Wesley Health Center*
- *Riverside Heart Institute of Ohio*
- *Riverside Regional Cancer Center*

ROBINSON
Memorial Hospital

6847 N. Chestnut Street
Ravenna, Ohio 44266
216-297-0811

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

Robinson Memorial Hospital has received and reviewed the 1986 mortality data from the Health Care Financing Administration (HCFA). Robinson Memorial takes seriously its responsibility for quality assurance in the delivery of health care. We agree with the principle that the public has a right to information relative to the quality of the hospital serving them. However, while our data compares favorably, we believe that raw data on mortality, in the form to be released by HCFA, does not represent an accurate or appropriate measure of quality. It is impossible to capture the many factors relating to patient outcomes and communicate this information for every hospital in the country.

We have a number of specific concerns regarding the HCFA statistics. First, the methodology used cannot distinguish differences in mortality due to quality of care from that due to patient condition. Second, it is inappropriate to use mortality as the sole indicator of quality. Third, it is inappropriate to include deaths after a patient goes home as this makes the hospital accountable for circumstances over which it has no control. Finally, because the published data lends itself to considerable misinterpretation by the public and the media, more explanatory information should have been provided. Similarly, for hospitals, HCFA should have provided the methodology used to establish the mortality ranges for each diagnostic category.

In summary, while we do agree with the value of providing the public meaningful information with which to evaluate quality of care, this information must be developed and communicated in a manner that minimizes the potential for misinterpretation. Anything short of this does a disservice to both the healthcare providers and the public.

Sincerely yours,

Ronald P. Winters

Ronald P. Winters,
Interim President

RPW:cm

SAMARITAN HOSPITAL
ASHLAND, OHIO 44805
HOSPITAL #360002

COMMENTS

1. The number of Medicare cases within the hospital's sample is reasonable in view of H.C.F.A's methodology for sample selection.

2. All 1986 deaths listed for the purpose of the H.C.F.A. study have been verified.

3. The actual mortality rate for all cases is not high.

4. After retrospective review of the cases by diagnostic category, it was determined that the method used by H.C.F.A. for assigning categories did not always reflect the cause of death.

   H.C.F.A.'s study is based on billing information which requires the use of a principal diagnosis, "that condition established after study be chiefly responsible for occasioning the admission of the patient to the hospital for care," therefore, significant comorbid conditions which were the primary diagnosis or the most important or significant condition of the patient in terms of his/her health, medical care, and use of hospital resources were not reflected in the statistics. Diagnostic category percentages, therefore, could be higher or lower depending on the billing code.

   For example, Diagnostic Category GC: Gastrointestinal Catastrophes, a patient was coded with a principal diagnosis of GI Bleed (578.0), however, the primary diagnosis and actual cause of death was Lymphocytic Leukemia (205.1). In the Diagnostic GC Category of the seven (7) deaths identified, three (3) cases or 43% were identified with this type of coding discrepancies.

5. For the purpose of the study, the study indicates that patients were categorized according to the cause of death with all other characteristics of the patient assumed to be average. We have found, however, a significant number of cases in which other criteria could be identified as the cause of death. In addition, another Diagnostic Category RN: Renal Disease, There was one (1) case who died. The patient had a long history of hypertensive cardiovascular disease which precipitated the renal disease. Diagnostic Category PN: Pulmonary Disease, reflects similar discrepancies, i.e., seventeen (17) deaths were identified of which 8 or 47% may be attributed to other criteria.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

COMMENTS (continued)

6. All 1986 deaths occurring within the hospital were reviewed by physicians through the hospital's Quality Assurance/Peer Review Program and the Mortality/Morbidity Conference. Areas of concern for the quality of care are identified, solutions proposed, and appropriate action is taken by the hospital and/or physicians.

U.S. HEALTH Corporation of Southern Ohio

One Health Place☐P.O. Box 1224☐Portsmouth, Ohio 45662☐Telephone: (614) 354-5000

Dallas K. Larson, President

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Scioto Memorial Hospital, Portsmouth, Ohio 45662
Hospital #360008

Dear Dr. Roper:

In response to the Medicare Mortality Data supplied by the Health Care Financing Administration, Scioto Memorial Hospital finds the information to be correct.

Our findings are based strictly on the HCFA methodology. We concur with the general consensus that the methodology is flawed. We particularly note the failure to include risk factors and severity of illness as predictive variables.

The mortality rates reported for Scioto Memorial do not reflect the degree of excellence we have achieved in health care delivery. It should be noted that Scioto Memorial Hospital is a regional referral center and is a major provider of in patient care for the terminally ill. Consequently, our case mix includes many terminally ill, high risk, critically ill patients from throughout our service area.

We would also comment that mortality data is only one of many factors to be considered in the evaluation of the quality of care delivered in any health care facility. We cannot, and do not, recommend the use of mortality rates for making judgements about the quality of care in an individual hospital or for making comparisons among hospitals.

Sincerely,

Dallas K. Larson
President

DKL:bb

SHELBY
THE CARING CENTER
Memorial Hospital

Morris Road • Post Office Box 608
Shelby, Ohio 44875

Tim Dutton, President
419 342 5015

October 23, 1987

William Roper M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue South West
Washington, D.C. 20201

Medicare Provider No. **360135**

Dear Doctor Roper:

In response to the mortality information forwarded to us from HCFA, we have the following comments:

We had 561 Medicare discharges in 1986.

1. One patient [redacted] (see attached [redacted]) is not dead as of 10/21/87! Please remove this patient from the mortality statistics.

2. 32 of these patients died while hospitalized. We do review mortality through our quality assurance process and have determined that no deaths occurred because of substandard care. Indeed, none were preventable. We do 100% review of all mortality within the hospital. This is reported to our Medical Staff through our QA process.

3. 8 expired after discharge. All were in the terminal state at discharge. One was discharged to a hospice program, four were discharged to a nursing home, and three were discharged with the home assistance of public health nursing.

We appreciate the opportunity to respond in this matter.

Sincerely,

Ron Distl
Vice-President
Administrative Affairs
Shelby Memorial Hospital

RD/rj

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

U.S. HEALTH Corporation of Southern Ohio

One Health Place ☐ P.O. Box 1224 ☐ Portsmouth, Ohio 45662 ☐ Telephone: (614) 354-5000

Dallas K. Larson, President

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Southern Hills Hospital, Portsmouth, Ohio 45662
Hospital #360167

Dear Dr. Roper:

In response to the Medicare Mortality Data supplied by the Health Care Financing Administration, Southern Hills Hospital finds the information to be correct.

Our findings are based strictly on the HCFA methodology. We concur with the general consensus that the methodology is flawed. We particularly note the failure to include risk factors and severity of illness as predictive variables.

The mortality rates reported for Southern Hills do not reflect the degree of excellence we have achieved in health care delivery.

We would also comment that mortality data is only one of many factors to be considered in the evaluation of the quality of care delivered in any health care facility. We cannot, and do not, recommend the use of mortality rates for making judgements about the quality of care in an individual hospital or for making comparisons among hospitals.

Sincerely,

Dallas K. Larson
President

DKL:bb

Mercy Hospital ☐ Olde Market Square ☐ Scioto Memorial Convalescent Center ☐ Scioto Memorial Hospital ☐ Southern Hills Hospital
A Subsidiary of U.S. HEALTH Corporation, Columbus, Ohio

SOUTHWEST
GENERAL HOSPITAL
18697 East Bagley Road • Middleburg Heights, Ohio 44130 • 216/826-8000

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Using the mortality rate as a QA indicator of an institution should never be allowed since it is not necessarily a true measurement of the quality of care a patient receives.

There are always some problems associated with the collection of date which often make the statistics invalid. During a brief review some of the following discrepancies were uncovered giving us some real concerns regarding the information you forwarded to us.

1) Two cases: One patient died and the second patient was discharged alive but both are listed as having the same Medicare numbers.

2) After reviewing the low risk diagnostic areas, one patient died from what appeared to be a fractured clavicle which was the principle diagnosis. This particular patient was admitted for the fracture, but had advanced COPD and later in the hospitalization suffered a CVA which was the cause of death. Another patient, 82 years old, was admitted with a principle diagnosis of UTI and Dehydration. The statistics look like the patient died from an UTI when the patient actually died from Acute MI and cardiac arrest. Another patient showed the cause of death as peptic ulcer disease but actually the cause of death was a cardiorespiratory arrest.

3) In two instances, after checking with the physician's office and the Cuyahoga County Bureau of Statistics we found no record of a death occurring. This area causes particular concern since one patient's supposed cause of death was cholelithiasis.

continued . . . .

A subsidiary of Southwest Community Health System

Although we sympathize with your legitimate concerns for patients and the care they receive, our belief is that the data release proposed is not the answer. We would suggest that a task force be established charged with the responsibility of isolating legitimate quality care measures which can be provided to the public in some yet to be determined format. The present methodology would seem only to frighten possible patients inappropriately for we found the information base to be relatively inaccurate and in our judgment that makes such a release dangerous,if not libelous.

Thank you for the opportunity to study this material.

Regards,

Susan K. Simpson
Susan K. Simpson
Nurse Reviewer UR/QA

L. Jon Schurmeier
President

/cb

cc: C. Wayne Rice
Donald R. Newkirk
Carol M. McCarthy, PhD.,J.D.

Saint Alexis Hospital Medical Center

5163 BROADWAY • CLEVELAND, OHIO 44127-1593 • (216) 641-3300

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Re: Hospital ID No. 360049

Dear Dr. Roper:

The statement below is in response to your recent letter regarding HCFA's 1986 Mortality Rates for Medicare beneficiaries, to be included with your public release of that information.

"Saint Alexis Hospital Medical Center welcomes the Health Care Financing Administration's review of the 1986 mortality rates for Medicare beneficiaries and appreciates this opportunity to comment on its findings.

"At Saint Alexis, all deaths are reviewed by the appropriate Medical Care and Appraisal Committees to ascertain that all appropriate measures were taken in the care of the patient. This data is then shared with the various Medical Departments, Medical Council, The Patient Care Committee and the Board of Trustees. Where there are questions of care, action is taken, and appropriate follow-up and monitoring are done.

"The Medical Center places the highest level of importance on assuring the quality of the care provided to our patients. The nursing staff, the medical staff, the administration and the board of trustees each have important roles and defined responsibilities to make certain that high quality care is provided to the patient and to thoroughly investigate, and to rectify if necessary, any problems which may adversely affect that care. This commitment is highly valued throughout the Medical Center.

"Our process for evaluation is specific and requires ongoing, comprehensive and complete evaluation of patient care.

Sponsored by the Sisters of St. Francis Health Services, Inc.

"After careful review by Quality Assurance officials at Saint Alexis, the data reported by HCFA presenting the mortality rates for Medicare beneficiaries who expired within 30 days after admission appear to be accurate. While some minor discrepancies were identified during our review, we believe that the data presented may provide us with another tool to complement our quality assurance program, especially if certain enhancements are added by HCFA in the future. (The discrepancies in the data do not affect the reported mortality rates, but are nevertheless identified on the attached sheet.)

"We wish to reiterate HCFA's cautions that their data is not a complete measure of the quality of care at an individual hospital and that they do not recommend the use of the information to make comparisons about the relative quality of care among hospitals. Other significant factors which impact on mortality remain to be considered such as the patient's general health status, the stage and severity of the patient's illness, the patient's psychological condition, and family support, among others. Even with these limitations, the data are useful in focusing quality assurance activities.

"While the HCFA report shows that for every category measured, the mortality rates at Saint Alexis were within the predicted ranges, the report still is not a total reflection of quality of care. It should be noted that many patients at Saint Alexis come from a poor, inner-city environment where many individuals often delay seeking care until their condition is at an advanced stage. Additionally, many of these individuals often may have several additional secondary illnesses present which adversely complicate their recovery.

"Lastly, the reader of the report should be aware that Saint Alexis operates a 35-bed skilled nursing facility where terminal care is often provided to patients, and such cases are thus also reflected in the HCFA data.

"Again, we wish to thank the Health Care Financing Administration for this opportunity to comment on their findings. We encourage the Administration to continue to work closely with the American Hospital Association and the Joint Commission on Accreditation of Hospitals in refining the methodology used in future reports to incorporate those factors which may, by their ommission, give inaccurate and misleading impressions, especially to those unfamiliar with the limitations of mortality rates as a measure of quality."

Sincerely,

Larry K. Lehner

Larry K. Lehner
President

LKL/el

cc: Sister Theresa Solbach, O.S.F.

Saint Alexis Hospital Medical Center

5163 BROADWAY • CLEVELAND, OHIO 44127-1593 • (216) 641-3300

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Re: Hospital ID No. 360049

Dear Dr. Roper:

The statement below is in response to your recent letter regarding HCFA's 1986 Mortality Rates for Medicare beneficiaries, to be included with your public release of that information.

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"At Saint Alexis, all deaths are reviewed by the appropriate Medical Care and Appraisal Committees to ascertain that all appropriate measures were taken in the care of the patient. This data is then shared with the various Medical Departments, Medical Council, The Patient Care Committee and the Board of Trustees. Where there are questions of care, action is taken, and appropriate follow-up and monitoring are done.

"The Medical Center places the highest level of importance on assuring the quality of the care provided to our patients. The nursing staff, the medical staff, the administration and the board of trustees each have important roles and defined responsibilities to make certain that high quality care is provided to the patient and to thoroughly investigate, and to rectify if necessary, any problems which may adversely affect that care. This commitment is highly valued throughout the Medical Center.

"Our process for evaluation is specific and requires ongoing, comprehensive and complete evaluation of patient care.

"After careful review by Quality Assurance officials at Saint Alexis, the data reported by HCFA presenting the mortality rates for Medicare beneficiaries who expired within 30 days after admission appear to be accurate. While some minor discrepancies were identified during our review, we believe that the data presented may provide us with another tool to complement our quality assurance program, especially if certain enhancements are added by HCFA in the future. (The discrepancies in the data do not affect the reported mortality rates, but are nevertheless identified on the attached sheet.)

"We wish to reiterate HCFA's cautions that their data is not a complete measure of the quality of care at an individual hospital and that they do not recommend the use of the information to make comparisons about the relative quality of care among hospitals. Other significant factors which impact on mortality remain to be considered such as the patient's general health status, the stage and severity of the patient's illness, the patient's psychological condition, and family support, among others. Even with these limitations, the data are useful in focusing quality assurance activities.

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Sincerely,

Larry K. Lehner

Larry K. Lehner
President

LKL/el

cc: Sister Theresa Solbach, O.S.F.

Corrections to 1986 HCFA Mortality Rates for
Saint Alexis Hospital Medical Center

Hospital ID Number 360049

Patient ID # (HIC)	Reported date of death	Actual date of death
[redacted]	3/31/86	3/24/86
[redacted]	2/28/86	2/21/86
[redacted]	12/31/86	12/23/86
[redacted]	11/30/86	10/31/86
[redacted]	5/29/86	5/26/86

All other data reported appear to be accurate.

St. Ann's
HOSPITAL
500 Cleveland Avenue
Westerville, Ohio 43081-8998
(614) 898-4000

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality information
Post Office Box 26684
Baltimore, Maryland 21207

To whom it may concern:

Enclosed are our comments regarding the HCFA mortality data to be released later this year. If there are any comments or questions please contact me at (614) 898-4156.

Sincerely,

Linda Hager
Linda V. Hager
Vice President - Marketing

LVH:lkd

Medicare Provider # 360012

St. Ann's
HOSPITAL

500 Cleveland Avenue
Westerville, Ohio 43081-8998
(614) 898-4000

We appreciate the efforts of the Health Care Financing Administration (HCFA) in attempting to provide the community with objective data concerning the care being provided by local hospitals. It is important to note that this is the very beginning of this effort and that other measures should also be developed. High or low mortality rates alone do not describe quality of care but are parts of a much larger process of quality assurance. Medicare patients represent only 20% of our admissions, so clearly, the data on Medicare patients are not applicable to the population at large. While the HCFA study suggests an overall mortality rate for Medicare patients, the non-Medicare population (80% of admissions at St. Ann's) experienced a mortality rate of less than 1% for the most recent twelve months.

Regarding the data, we were able to validate that all of the patients listed in the HCFA report except one (listed on the attached sheet) were hospitalized at St. Ann's during the study period. We were pleased that the actual mortality rate as well as the mortality rate for each diagnostic category was within HCFA's predicted range. This was particularly notable since the sample sizes were quite small and the average age of those who died was 79 years. We feel it will be important in HCFA's future methodologies to include greater input based on the stage of the patient's illness, psychological condition and general health status at the time of admission. At St. Ann's for example, over 40% of the expired patients in the HCFA study were transferred here from nursing homes. Also, the HCFA mortality data includes all patients who died following their discharge, so long as that death occurred within 30 days after their admission. 30% of the HCFA deaths reported for St. Ann's were those discharged patients.

St. Ann's
HOSPITAL

500 Cleveland Avenue
Westerville, Ohio 43081-8998
(614) 898-4000

The primary goal at St. Ann's Hospital is to provide the highest quality medical care which includes meeting the physical, emotional and spiritual needs of our patients and their families. Respect for the individual and their wishes is inherent in all our actions. Measuring quality is a difficult task because each person comes to us with a unique set of needs.

At St. Ann's we maintain an ongoing program of quality assurance to continuously evaluate patient care. The Department of Quality Assurance includes two nurses and an individual with medical records training. In addition, we also have nine different committees of the medical staff and one in the nursing department to ensure the maintenance a high level of quality in all services.

The Quality Assurance staff reviews each patient's chart on admission for the severity of the illness and re-examines it again within 24 hours. Based on the severity of illness and intensity of service, the patient's course of treatment is regularly evaluated. Prior to discharge, each patient's chart is once again examined. Each and every case is evaluated following discharge and compared to a pre-established set of quality criteria. Identified cases are sent to the appropriate committees with actions taken as needed. All deaths are reviewed by a minimum of at least one committee made up of members of the St. Ann's Medical Staff.

For more information contact John B. Sandman, President at 898-4152.

St. Ann's
HOSPITAL
500 Cleveland Avenue
Westerville, Ohio 43081-8998
(614) 898-4000

UNVALIDATED CASE

[redacted] Age 87, Sex - F, 10/28-10/29.

Saint Anthony Medical Center
1492 EAST BROAD STREET • COLUMBUS, OHIO 43205

MEDICARE PROVIDER NO: 360062

Our calculations indicate a lower rate of mortality in all categories, except one which was the same, and therefore indicate a lower incidence of mortality than that reported by HCFA.

The mortality rates published by HCFA should not be used as a basis to judge the quality of care provided by a hospital. Too many factors have been excluded which significantly impact mortality, such as the patient's general health status, the stage of the patient's illness, psychological condition, and family support. The cause of death could be attributed to any reason, not necessarily related to the admission diagnostic category used in the statistics, nor did the death need to occur in the hospital. Any death occurring within 30 days of admission was included, even if from an unrelated cause post discharge (e.g., accident).

Quality judgements can be made only after reviewing actual case information contained in a patient's medical record. Our hospital is committed to providing the best possible quality care and have on-going analysis of patient records as part of our hospital-wide quality assurance program.

a member of
FRANCISCAN SISTERS OF THE POOR • HEALTH SYSTEM, INC.

SAINT ANTHONY MEDICAL CENTER MORTALITY STATISTICS, 1986

DIAGNOSTIC CATEGORY	TOTAL CASES HCFA	TOTAL CASES SAMC	TOTAL EXPIRED HCFA	TOTAL EXPIRED SAMC	EXPIRED POST DISCHARGE HCFA	EXPIRED POST DISCHARGE SAMC	MORTALITY RATES HCFA	MORTALITY RATES SAMC	HCFA RANGE OF PREDICTED MORTALITY RATES	COMMENTS
ALL CAUSES	2652	4420	256	256	48	34	10%	6%	8 to 14%	
Cancer	125	218	29	33	8	7	23%	15%	15 to 34%	
Cerebovascular Accidents	112	182	26	33	2	2	23%	18%	19 to 37%	
Ophthalmologic Disease	20	28	0	0	0	0	0%	0%	0 to 87%	
Gastrointestinal Catastrophies	48	74	9	12	0	0	19%	16%	8 to 32%	
Gastrointestinal Disease	186	291	7	8	3	1	4%	3%	2 to 10%	
Urologic Disease	85	154	7	7	0	0	8%	5%	2 to 14%	
Gynecologic Disease	8	14	0	0	0	0	0%	0%	0 to 37%	
Low-Risk Heart Disease	119	221	12	10	2	1	10%	5%	2 to 11%	One patient in this category should have been included under Severe Chronic Heart Disease per the principle diagnosis.
Severe Chronic Heart Disease	150	287	20	23	7	7	13%	8%	14 to 28%	
Severe Acute Heart Disease	69	139	31	33	5	4	45%	24%	29 to 53%	
Metabolic/Electrolyte Disturbances	77	133	17	18	6	5	22%	14%	10 to 32%	
Orthopedic Disorders	381	519	3	2	1	1	1%	.4%	0 to 4%	
Pulmonary Disease	175	311	27	37	4	4	15%	12%	13 to 28%	
Renal Disease	22	42	7	9	2	2	32%	21%	6 to 45%	
Sepsis	37	58	14	15	0	0	38%	26%	22 to 55%	
Severe Trauma	55	82	2	2	0	0	4%	2%	4 to 21%	
Unknown/Other	983	1667	45	14	8	?	5%	5%		
Expired In Subsequent Year			8	?	1	?				Figures Are Included In Above Categories.

OH 168.1

2600 Navarre Avenue
Oregon, Ohio 43616
(419) 698-7200

ST. CHARLES
HOSPITAL

A Sisters of Mercy Health Care Facility

October 23, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 30201

Dear Dr. Roper:

In response to the hospital mortality statistics scheduled for public release by HCFA, St. Charles Hospital has the following comments:

1. St. Charles Hospital's specific mortality rates fall into the predicted range for every category. Nevertheless, we are skeptical of the methods used to develop the statistics and any conclusions which might be drawn from them.

2. Our own records show that 4,366 Medicare admissions occurred in 1986. The data used by HCFA indicates that a total of 1,982 patients were admitted. Presumably, the discrepancy reflects multiple admissions of individual beneficiaries. However, an overall mortality rate calculated for the number of admissions equals 5%, rather than 12% based on the number of patients. This further invalidates the mortality rates for the individual diagnostic categories.

3. Mortalities were categorized by the principal diagnosis for which the patient was admitted. In many cases, where patients had multiple problems at the time of admission, the cause of death and the principal diagnosis were not directly related. This may result in invalid conclusions drawn in a category where the mortality rate approaches or exceeds the upper limit of the predicted range.

4. The medical records of all patients who are included in our statistics but did not expire while hospitalized were

evaluated. Of these patients, many were known to be terminally ill and elected to continue their care in a more personal, comfortable setting. All were determined to be in satisfactory condition relative to the care arrangements to which they were discharged.

5. Review of the medical records of all patients in the Severe Chronic Heart Disease Category showed that 22% (8/36) did not die while in the hospital. Also, 61% (19/31) of the patients who died while in the hospital had requests at the time of admission that no heroic measures be utilized for them. This shows that many patients with severe chronic heart disease chose death rather than extreme medical intervention which may have prolonged life.

Most hospitals, in conjunction with professional organizations and accreditation and licensing agencies, have well-developed quality assurance programs designed to measure and improve the quality of care we provide our patients. We do support your efforts to provide consumers with meaningful information and hope that you will continue to work with the health care industry in this regard.

Sincerely,

Robert P. Millen

Robert P. Millen
Vice President Marketing

Medicare Provider No.: 360081
mc

St. Elizabeth Medical Center

601 Edwin C. Moses Blvd.
Dayton, Ohio 45408

Executive Offices

Member of
Franciscan Sisters of the Poor
Health System, Inc.

October 26, 1987

TO: Health Care Financing Administration
Health Standards & Quality Bureau

FROM: St. Elizabeth Medical Center
Medicare Provider #36-0018

RE: HCFA Mortality Rates Disclosure Response

We have found several discrepancies in the HCFA statistical data. The number of mortalities expressed in the HCFA report is in error. For example, based on a sample of 144 cases, 17 had discrepancies in either the date of death or the discharge date, and one patient was discharged to another hospital.

A 15% error in number of cases exists, as well. This error may exist because statistics were based on admissions instead of discharges. Appropriately, mortality rates should be based on discharges since death is certainly a discharge. Correction for this error would lower the St. Elizabeth mortality rate significantly. The error also may be due in part to the source of data (billing information) that should not have been used for this clinical analysis.

While St. Elizabeth Medical Center's Medicare mortality rates fall well within the stated expected range, we feel mortality rates alone do not indicate quality of care. Quality can only be evaluated through the process of peer review, not simplistic statistical comparisons.

The St. Elizabeth board of trustees, medical staff and administration routinely monitor mortality rates, as well as numerous other indicators of patient outcome. Indicators include autopsy rates, infection rates, readmission rates and many more. These indicators are not reflected in the HCFA report.

St. Elizabeth has an on-going quality assurance program that involves physicians in each speciality who serve in a peer review capacity. This review process includes the use of the above rates and other statistical data. In addition, care provided to patients in all services is evaluated for appropriateness and cost effectiveness. All care is monitored and randomly sampled for evaluation even when a problem in care is not noted statistically. Specific concerns of patients, especially complaints, are routinely evaluated and individually addressed by administration and the medical staff, as well.

Although the information contained in this report will be used as another measure of clinical care by our quality assurance program, it will be used prudently and in conjunction with other information.

Our goal is to provide quality health care to the community in a cost-effective manner. We believe we offer excellent care to all patients, including those serviced by Medicare. The use of mortality data, although an important part of identifying possible trends in quality, has not been proven to be useful in the evaluation of quality care.

FRANCISCAN HEALTH SYSTEM
OF CINCINNATI, INC.
P.O. Box 3157
Cincinnati, Ohio 45201

October 29, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Although the HCFA 1986 Mortality data show that St. Francis-St. George falls within expected ranges in all disease categories, we have a profound disagreement with HCFA regarding the intended use of these statistics.

First, "quality" cannot be quantified or determined solely by the number of deaths in an institution. The data you have do not define quality, as you already have stated in your letter to each institution.

Second, the data are not complete, are inconsistent, and cannot be used to make any type of statistical comparisons or decisions. Your instructions to each institution have stated that one cannot draw conclusions from the data; given that the statistics are to be presented to many readers, this impairment should be highlighted to a great extent. The use of a "warning" would be appropriate.

The apparent purpose of HCFA data is to compare actual death rate in a given institution to expected death rate given certain specific parameters. But, only HCFA knows who and what were included in the data. The information provided has only limited patient characteristics. Conclusions regarding our particular institution cannot be made given this limited information.

If HCFA releases "mortality data," St. Francis-St. George makes the following recommendations:

1. Be consistent; use the same language throughout the system. That is, use DRG language as opposed to the proposed terminology.

2. Limit the deaths included in the report to those that actually occurred in the facility. Those occurring outside the facility, within 30 days of discharge may have additional, unrelated causes.

3. Include the total length of stay and the total number of admissions in the statistics. Compare the total Medicare admissions to the total Medicare deaths to develop more complete and valid statistics. Also, use more than a 12-month period.

4. Give more thought to the American Hospital Association's input on the study model. Form a joint task force, involving more people who are in the healthcare industry day-to-day, to provide assistance in defining quality and compiling worthwhile statistics.

5. Allow more than 30 days for hospitals to comment. The amount of staff time involved in reviewing the data and writing the response to data presented in the current format is significant (and can only contribute to higher healthcare costs).

6. The statistical model needs to be less complicated so that those who receive it, including the public, have a better chance to understand it.

In conclusion, St. Francis-St. George agrees with the underlying effort by HCFA to enhance the quality of care provided by hospitals. **We stand by the care given our patients and the services we provide.** We believe that HCFA, however, is doing a great disservice to the families of patients included in the study. Their anxiety, anguish and potential guilt feelings that may be generated by misinformation supplied by HCFA should not be permitted to occur. As in any effort to monitor quality, the methods of analyzing and communicating the findings need to be carefully considered.

Thank you for the opportunity to comment on HCFA's mortality report.

Sincerely,

Daniel P Hogan

Daniel P. Hogan
Vice President and Treasurer

DPH/dls

St. John Medical Center
St. John Heights Steubenville, OH 43952 614-264-8000

ST. JOHN MEDICAL CENTER #360083
Steubenville, Ohio

COMMENTS ON HCFA MORTALITY INFORMATION

The data reported by HCFA for Medicare mortality rates for 1986 appear to be correct.

However, the HCFA practice of counting only the last admission to a hospital in computing the total number of cases and the actual mortality rate is unfair to a facility like St. John Medical Center, which is one of two hospitals in an economically depressed area and the only facility that offers certain services, because the last admission in many cases is also the most chronic or most acute admission and the most likely to result in death. If all Medicare admissions were included, the overall mortality rate for St. John Medical Center would be reduced by almost fifty percent.

Locally, St. John Medical Center is the facility that provides more extensive services for severe, chronic and acute heart diseases. The patients who are seen exceed the national norms for chronicity. The age of the patients also tends to be higher for these DRG's than in most places.

Steubenville, Ohio, where St. John Medical Center is located, is an area where coal mining and steel making are the main industries. The environmental impact from these industries is reflected in the higher and more chronic cases of pulmonary disease. The incidence of risk factors such as cigarette smoking, diabetes and genetic predispostion must be considered.

As the only hospital in the immediate area with a Renal Dialysis Unit, St. John Medical Center can be expected to have a higher mortality rate from renal disease than hospitals that do not offer such a service.

Sister Alice Warrick, President

Date: October 26, 1987

Caring For You Since 1901
Gill Memorial Hospital 1901-1968 St. John Medical Center Since 1960

St. John & West Shore Hospital

Hospital Medicare # 360123

HCFA MORTALITY REPORT

Measuring the quality of health care delivery and presenting such findings to the public, upon which an informed judgment can be made, has thus far eluded the entire health care profession due to all the variables and the uniqueness of each human being and their reaction to medical therapy.

Although the HCFA Mortality Data for St. John & West Shore Hospital shows us to be within the predicated mortality rate ranges for the 17 diagnostic categories of diseases measured, it would be simplistically incorrect to use this data alone as a quality of care measurement.

Within these 17 categories, we are in the low of the predicated range in five categories, mid range in ten, and near the high end in two. However, we should like to point out the weaknesses in these data for quality measurement purposes.

In two diagnostic categories, the range of predicated mortality is 0-100% and 0-92%. In effect, this does not establish any meaningful measurement.

Also, this data counts all deaths within 30 days of discharge from the hospital. One has to make the assumption that these deaths were due to the illnesses that caused the last hospitalization. The logic and medical validity of this assumption remains to be established.

Thus, mortality rates, by themselves, do not measure quality but can be appropriately used to focus peer review.

Clinical conferences reviewing each death in the hospital has been a standard part of quality review since the 1800's and an essential part of the teaching and learning process.

The model used by HCFA to predict mortality ranges does not take into consideration measures of severity, that is, how ill was the patient. A diagnosis does not convey the severity of an illness or other conditions (co-morbidity) that may be present with the illness. Thus, measuring quality of care becomes a complex process.

The American Hospital Association, the Joint Commission on Accreditation of Hospitals and other organizations are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. We at St. John & West Shore Hospital look forward to the results of these efforts.

Westlake Health Campus
29000 Center Ridge Road Westlake, Ohio 44145 Phone (216) 835-8000
John A. Rowland, President

St. John &
West Shore
Hospital

Our current efforts to ensure quality care result in countless hours of peer review utilizing specially trained personnel to review records. This effort is hospital wide and covers every phase of patient care, both direct and indirect, physician and non physician.

Occurrence screens (an unexpected result or event) are applied to every patient in the hospital. When an occurrences take place, it is reviewed and tracked to see if patterns are developing. Actions to prevent future occurrences are taken. Criteria developed to measure individual patient care and treatment, by illnesses, are also used as screens on all patients with that illness. Cases not meeting all the criteria are reviewed. Computerized programs match each drug a patient may be taking against any others in his treatment program for possible drug incompatibility. If incompatibility is detected, appropriate changes in times of administration, dosage or a different drug can be prescribed to maximize results and hasten patient response to treatment.

Hopefully in this limited response, the reader can begin to understand the complexity of measuring quality of care and develop an appreciation of the extent, volume and magnitude of the process of what is called "quality assurance review".

If the HCFA data does nothing more than sensitize the public to the magnitude of quality assurance activities going on daily in hospitals, it will have served a valuable purpose.

John A Rowland

John A. Rowland, President
St. John & West Shore Hospital

Westlake Health Campus
29000 Center Ridge Road Westlake, Ohio 44145 Phone (216) 835-8000
John A. Rowland, President

St. Joseph Hospital
& Health Center

205 West 20th Street
Lorain, Ohio 44052-3794
(216) 245-6851

ST JOSEPH

DATE: October 16 1987

Provider Number: 360204

Thank you for the opportunity to review our hospital's mortality rates prior to public release. We found only two errors in the data. Both errors related to patient age. We offer this information to inform you of the integrity of the data used on our hospital.

Sincerely,

The Medical & Hospital Staff
St. Joseph Hospital & Health Center

St. Joseph Riverside Hospital
1400 TOD AVE., N.W. / WARREN, OHIO 44485-2499 / (216) 841-4000

VIA PUROLATOR

October 27, 1987

Mr. William L. Roper, M.D.
Administrator
Health Care Financing
 Administration
The Administrator
Washington, D.C. 20201

Re: St. Joseph Riverside Hospital
Medicare Provider No.: 36-0021

Dear Dr. Roper:

St. Joseph Riverside Hospital's actual mortality rates fall inside of the range of the predicted mortality rates in each of the diagnostic categories listed. However, you are aware that the model used offers only a crude estimate of the expected risk of death as it is not known that the five patient characteristics included in the model are the most significant factors influencing the risk of death.

Only four of the sixteen diagnostic categories for St. Joseph Riverside Hospital have over 100 cases reported. Even in these categories, the data cannot be considered of themselves as measures of hospital quality performance. They can only, at best, be considered a source to focus quality assurance activities. They should not be used as the basis for judging the quality of care for any hospital.

Sincerely,

Gerald H Klein

Gerald H. Klein
Assistant Executive
Director of Finance

GHK:dg

Sponsored by the Sisters of the Humility of Mary

St. Luke's Hospital

5901 Monclova Road
Maumee, Ohio 43537
419/893-5911

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

We received and reviewed the mortality data used by Health Care Financing Administration and respectfully submit our corrections to the data, attached as Exhibit A. We are sending it to your attention because the packet we received did not contain the self-addressed return envelope.

Thank you for the opportunity to review this information prior to public release in December.

Sincerely,

Frank J. Bartell III
President

FJB:mdc

attachment

Exhibit A

St. Luke's Hospital

5901 Monclova Road
Maumee, Ohio 43537
419/893-5911

Medicare Provider Number:
36-0090

COMMENTS ON HCFA MORTALITY DATA

DATA VERIFICATION

The data used by HCFA for mortality calculation indicate a total of 2310 Medicare cases were admitted to St. Luke's Hospital. Our records indicate that 3711 Medicare patients were discharged from St. Luke's in calendar 1986. This discrepancy is probably due to the fact that HCFA data included only the last admission for each patient rather than all admissions per patient for this time period.

Our records indicate the following patients were incorrectly listed in the HCFA mortality list.

HIC NUMBER	SURNAME	COMMENTS
[redacted]	[redacted]	There is no record of a patient by this name in St. Luke's Hospital from 6/01/86-6/04/86 as listed by HCFA. This death should be deleted from St. Luke's mortality data.
[redacted]	[redacted]	HCFA lists this patient death as after discharge from St. Luke's, on 11/30/86. Our records indicate the patient died while still an inpatient on 11/11/86.
[redacted]	[redacted]	HCFA lists this patient death as after discharge from St. Luke's on 09/30/86. Our records indicate the patient died while an inpatient at St. Luke's on 09/14/86.
[redacted]	[redacted]	HCFA lists this patient's death as occurring at St. Luke's on 01/17/86. Our records indicate that the patient was discharged alive on 01/17/86.

Because detailed information available to HCFA was not available to St. Luke's Hospital, it is impossible to verify the accuracy of diagnostic or other data used in this HCFA analysis.

SHA
SAINT LUKE'S HOSPITAL ASSOCIATION
11311 SHAKER BOULEVARD / CLEVELAND, OHIO 44104 / (216) 368-7000

PRESIDENT AND
CHIEF EXECUTIVE OFFICER
P. DAVID YOUNGDAHL
368-7710

In interpreting the HCFA data for all hospitals it is helpful to keep in mind:

1. This data is only for medicare patients.
2. The model does not fully reflect: past general health, the stage of illness at the time of admission, and the patient's psychological condition.
3. Mortality rates should be used to identify areas for review. The data is very useful in raising questions in diagnostic categories, but the answers to those questions must be found by review of each individual patient's medical record.
4. Since some deaths occurred after discharge, the cause of death listed in the data is an assumption and not a documented fact.

At Saint Luke's Hospital, we are well within the ranges established by the HCFA model. But it is important to keep in mind that statistical variations between hospitals do not necessarily indicate poor performance; they can signify availability of special services for high risk patients. These services logically attract a high risk population and ultimately affect the mortality rates in any given institution.

Saint Luke's has several services in place that accomodate a large number of high risk patients:

> In the area of cancer treatment, we have a free-standing chemotherapy function in the eastern suburbs in addition to chemotherapy at the hospital itself. This brings many patients into our system due to the convenience of treatment close to home. In addition, we have a radiation therapy program in the southeast suburbs that also draws high risk patients into our cancer program because of the convenience factor.
>
> Our pulmonary rehabilitation program was developed to assist very high risk, chronic obstructive pulmonary disease patients deal with their condition and lead a more productive life. Since this service is not available at all hospitals, and we run this program both at the hospital and in the suburbs, we draw many patients with this diagnosis into the Saint Luke's system.
>
> In 1983, Saint Luke's became the first verified Level 1 trauma service in the Cleveland area. Since that time, our numbers of critically injured trauma cases has steadily increased.
>
> We have developed a satellite emergency and trauma service in the southeast suburbs with a sophisticated transportation system that includes paramedics, ambulances and helicopters. This has resulted in an increased flow of critical cases to Saint Luke's which includes both medical and trauma categories.

SHA
SAINT LUKE'S HOSPITAL ASSOCIATION
11311 SHAKER BOULEVARD / CLEVELAND, OHIO 44104 / (216) 368-7000

PRESIDENT AND
CHIEF EXECUTIVE OFFICER
P. DAVID YOUNGDAHL
368-7710

Saint Luke's Hospital
11311 Shaker Boulevard
Cleveland, Ohio 44104
Medicare Provider #36-004

INTERPRETATION OF HCFA DATA

We have applied the HCFA-defined mortality criteria to our computerized data base of 1986 Medicare admissions. As the attached exhibit indicates, our data differ significantly from HCFA's in that we find approximately 1,000 more 1986 admissions which fall into the categories defined by HCFA's ICD9 assignments. Our overall mortality rate calculates out to 9% rather than the 11% reported by HCFA. Our calculated mortality rates by diagnostic category are lower than HCFA's in 10 categories, and higher than HCFA's in 2 categories. In all categories we continue to fall within the "predicted mortality rate" ranges.

HCFA's data also indicate that 51 of the reported deaths occurred after discharge and within 30 days of admission. We find that this is partially true. According to our data, fourteen cases reported as post-discharge deaths by HCFA actually occurred in the hospital. We agree that 37 patients were discharged alive from Saint Luke's Hospital. We have so far been able to verify that 18 of these 37 patients died post-discharge, as reported by HCFA. In 17 of the remaining 19 cases, physicians' offices have been unable to verify the HCFA reported date of death. One death did in fact occur almost two months after the inpatient admission, and should not have appeared on the HCFA-defined list.

The Saint Luke's Hospital (SLH) cases are for all Part A Medicare patients admitted in 1986. If a patient is admitted more than once during 1986, only the last inpatient visit is included in the statistics.

The number of SLH deaths listed are for all Part A Medicare patients that expired at or outside SLH within thirty days of the date of admission. These deaths have been manually adjusted by the HCFA statistics provided SLH.

Diagnostic Category	SLH Cases	SLH Deaths	SLH Calculated Mortality Rate	HCFA Reported Mortality Rate	HCFA Predicted Mortality Rate
Cancer	234	51	22%	25%	(18% - 35%)
Cerebrovascular Accidents	97	28	28%	30%	(17% - 40%)
Ophthalmologic Disease	206	0	0%	0%	(0% - 8%)
Gastrointestinal Catastrophes	47	10	21%	20%	(6% - 35%)
Gastrointestinal Disease	227	10	4%	5%	(3% - 12%)
Urologic Disease	147	4	3%	4%	(1% - 13%)
Gynecologic Disease	8	0	0%	0%	(0% -100%)
Low-risk Heart Disease	388	14	4%	6%	(2% - 8%)
Severe Chronic Heart Disease	163	21	13%	15%	(15% - 31%)
Severe Acute Heart Disease	95	34	36%	36%	(28% - 52%)
Metabolic/Electrolyte Disturbances	64	13	20%	22%	(9% - 36%)
Orthopedic Disorders	273	0	0%	0%	(0% - 5%)
Pulmonary Disease	164	31	19%	24%	(12% - 29%)
Renal Disease	17	6	35%	43%	(11% - 61%)
Sepsis	24	13	54%	36%	(20% - 59%)
Severe Trauma	112	5	5%	6%	(4% - 29%)
All Other Causes	830	41	5%	Not Reported	Not Reported
Total Calculated by SLH	3153	281	9%		(8% - 15%)
HCFA Data:	2081	219		11%	(8% - 15%)

Information Systems Department
October 26, 1987

St. Rita's
MEDICAL
CENTER

October 21, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Re: Medicare Mortality Information - St. Rita's Medical Center
Medicare Provider Number: 360066

Dear Doctor Roper:

In response to your letter of September 21, 1987, in which you included 1986 Medicare Mortality Data for St. Rita's Medical Center, the following comments are offered.

The number of Medicare admissions for 1986 appears to be accurate. Each death that occurred at St. Rita's has been verified. However, there were six cases in which we find that our data differs from data supplied by HCFA:

1. Patient [redacted]

   Your information indicates that this patient expired on 2-11-86. Our information indicates this patient expired in October, 1987.

2. Patient [redacted]

   Your data indicates date of death on 8-20-86. Our records indicate date of death on 8-18-86.

3. Patient [redacted]

   Your date of death is indicated on 10-31-86. Our records indicate date of death on 10-14-86.

4. Patient [redacted]

   Your information indicates date of death on 9-23-86. Our records indicate date of death on 9-16-86.

St. Rita's Medical Center 730 WEST MARKET STREET, LIMA, OHIO 45801, TELEPHONE 419/227-3361

5. Patient [redacted]

Your records indicate date of death on 12-31-86.
Our records indicate date of death on 12-27-86.

6. Patient [redacted]

Your records indicate date of death on 11-30-86.
Our records indicate date of death on 11-11-86.

We also believe that review of mortality data by diagnostic category as compiled by HCFA is not a reliable method of indicating mortality rate. HCFA uses the principle diagnostic code when categorizing deaths by diagnostic category. However, the principle diagnostic code may or may not reflect the true cause of the death. For example, our analysis of the data indicates that 22 cases which are listed under diagnostic categories other than cancer, actually died from problems that occurred because of cancer, i.e., dehydration, pleural effusion, pneumonitis, convulsions, shock, or chemotherapy.

In essence, we question the accuracy of the categorization of deaths within the Diagnostic Categories. If deaths are not appropriately allocated to the proper Diagnostic Category, the mortality rates within the Diagnostic Categories become suspect and the confidence level for the data as presented is questionable.

Thank you for the opportunity to comment on the data particular to St. Rita's Medical Center prior to its public release in December, 1987.

Sincerely,

Sister Rita Mary Wasserman

Sister Rita Mary Wasserman
President

SRMW:di

Saint Thomas Medical Center
444 North Main Street • Akron, Ohio 44310 • [216] 379-1111

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Saint Thomas Medical Center has received the Health Care Financing Administration's (HCFA) mortality statistics scheduled for release in December, 1987. The following remarks represent our response to the report, and reflect our opinion that the statistics are not an appropriate instrument for the measurement of quality of care.

Saint Thomas Medical Center has consistently pursued the highest level of health care possible. Quality of care is monitored in every aspect of our operation, and includes extensive interaction with a patient from the day of admittance until well after discharge. We firmly believe quality of care is without question the single most important facet of health management.

The public is entitled to information concerning the quality of care received at medical facilities, provided that the information is accurate and relates to quality of care issues.

Our concern with the HCFA statistics is two fold. One, mortality statistics cannot fairly serve as a measurement of quality of care, as they do not assess variables such as the patient's condition and other factors. Two, an inherent weakness exists in the statistics themselves when deaths that happened after discharge are included in the data base. The Medical Center can in no way control the circumstances surrounding this event.

In conclusion, we cannot support either the methodology used to compile the HCFA statistics or the contention that they in any way reflect upon a medical facility's quality of care. Saint Thomas Medical Center has established a tradition of quality health care in the Akron community. That, plus our ongoing programs to ensure quality of care in every area of our Center, and our strict adherence to the Joint Commission on Accreditation of Health Care Organizations' standards, will serve as our guide.

Sincerely,

William G. Hulbert
President

Saint Vincent
Charity
Hospital
& Health Center

David D'Eramo, Ph.D.
President and Chief Executive Officer

The Downtown Hospital
Since 1865

2351 East 22nd St.
Cleveland, Ohio 44115
(216) 861-6200

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Saint Vincent Charity Hospital and Health Center accepts your invitation to comment on your selected mortality report. Enclosed is our commentary.

Yours truly,

D. D'Eramo

David D'Eramo, Ph.D.
President and Chief Executive Officer

Saint Vincent
Charity
Hospital
& Health Center

David D'Eramo, Ph.D.
President and Chief Executive Officer

The Downtown Hospital
Since 1865

2351 East 22nd St.
Cleveland, Ohio 44115
(216) 861-6200

October 27, 1987

INVITED COMMENTARY ON HCFA SELECTED MORTALITY DATA

Saint Vincent Charity Hospital and Health Center (SVCH&HC) welcomes the opportunity to comment on selected mortality information provided by your administration for Medicare beneficiaries treated at our hospital in the year 1986.

We applaud HCFA's intent to provide information which could help Medicare consumers make more informed decisions about their health care. However, the data prepared by HCFA for public release with regard to SVCH&HC is inaccurate and the methodology used is seriously flawed.

We do agree with HCFA and reemphasize that mortality rates are not an accurate reflection of the quality of care provided by institutions, but our concern is that those comparisons which will be made will not take all important variables into account.

The data provided by HCFA for SVCH&HC indicates that expected deaths in all categories are within acceptable predicted ranges. Mortality rates (by HCFA definition) are derived by dividing the number of Medicare beneficiaries into the number of deaths and are then expressed as a percentage of deaths. When actual hospital data is used, there is a significant change in the mortality rates, which then compare even more favorably with HCFA predicted mortality rates (Figures 1A and 1B).

FIGURE 1-A

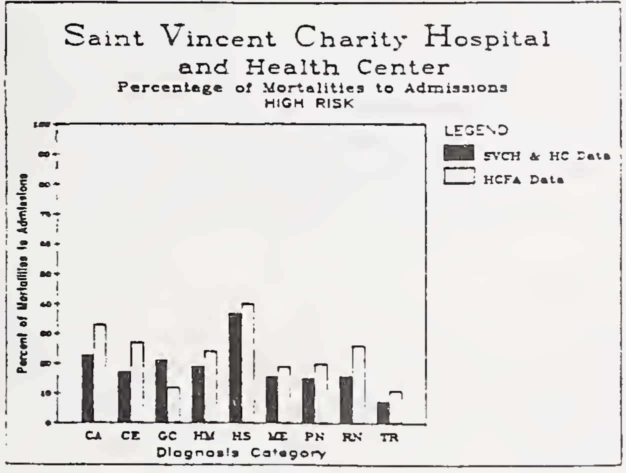
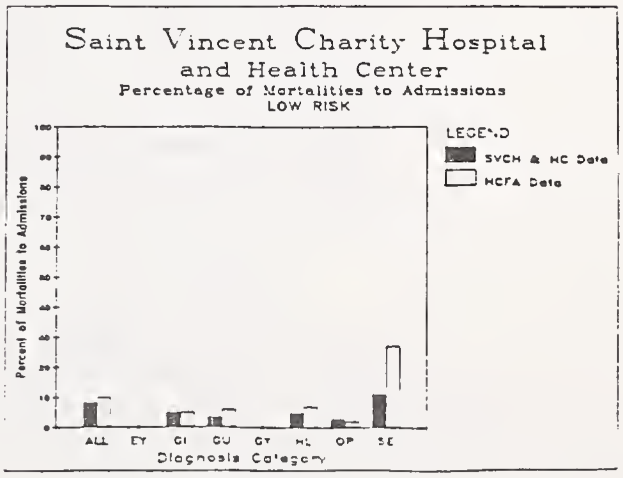


FIGURE 1-B



Comparison of HCFA data with SVCH&HC data, for the same time period (Figure 2) shows that we treated 597 Medicare beneficiaries not included in HCFA data and experienced three additional deaths within this group. Using actual hospital data, our death rate for "all causes" is reduced by 1.9 percent (from 10.0 to 8.1 percent). This represents a significant (18 percent) reduction in our overall mortality rate.

FIGURE 2

SAINT VINCENT CHARITY HOSPITAL & HEALTH CENTER
MEDICARE MORTALITY DATA
FISCAL YEAR 1986

DIAGNOSTIC CATEGORY	NUMBER OF CASES HCFA	NUMBER OF CASES SVCH	MORTALITY RATE ACCORDING TO HCFA	MORTALITY RATE ACTUAL SVCH
ALL CAUSES	2,539	3,136	10.0%	8.1%
CA - CANCER	129	141	33.0%	22.7%
CE - CEREBRAL VASCULAR ACCIDENTS	55	81	27.0%	17.3%
EY - OPHTHALMOLOGIC DISEASE	10	13	0.0%	0.0%
GC - GASTROINTESTINAL CATASTROPHIES	34	19	12.0%	21.1%
GT - GASTROINTESTINAL DISEASE	164	229	5.0%	4.8%
GU - UROLOGIC DISEASE	50	61	6.0%	3.3%
GY - GYNECOLOGIC DISEASE	8	8	0.0%	0.0%
HL - LOW RISK HEART DISEASE	454	580	7.0%	4.5%
HM - SEVERE CHRONIC HEART DISEASE	134	142	24.0%	19.0%
HS - SEVERE ACUTE HEART DISEASE	63	79	40.0%	36.7%
ME - METABOLIC/ELECTROLYTE DISTURBANCES	53	51	19.0%	15.7%
OP - ORTHOPEDIC DISORDERS	346	331	2.0%	3.0%
PN - PULMONARY DISEASE	128	158	20.0%	15.2%
RN - RENAL DISEASE	19	19	26.0%	15.8%
SE - SEPSIS	15	9	27.0%	11.1%
TR - SEVERE TRAUMA	37	41	11.0%	7.3%

Saint Vincent Charity Hospital and Health Center is an urban, tertiary care facility. By Medicare's own classification system, our institution ranks second highest in the greater Cleveland area in the severity of illnesses we treat. While HCFA suggests that predicted mortality rates for each hospital take into account the severity of illness, many recognized variables were not included in HCFA's formula (including principal diagnosis versus cause of death, patients brought in from nursing homes, and complications other than the first four assigned by HCFA). Significantly, of the variables which were included to determine hospital-specific predicted mortality rates for SVCH&HC, almost 12 percent of the data applied was incorrect. The public, therefore, cannot rely upon HCFA information for facility-to-facility comparisons of mortality rates.

Because of the limited variables built into the HCFA statistical model, we feel that it is imperative to note other factors which weigh heavily on patient outcomes. As a major heart center in the state of Ohio, for example, almost 22 percent of our cardiac mortalities were patients transferred from other hospitals when the patient failed to improve with ordinary methods of treatment. The vast majority of Medicare patients in the cardiology categories who died in 1986 at SVCH&HC were clearly in the end stage of their chronic illness. Their average age was over 73 years and they had experienced an average of three hospitalizations in their last year of life.

HCFA's designation of low-risk heart disease is misleading. A full 100 percent of patients in this category at our institution were found to have coexisting diseases, any of which would have placed them in a high-risk category had they not also had heart disease. Because so many coexisting high-risk conditions were secondary to the so-called "low-risk" heart disease, the "low-risk" diagnosis, to be factually correct, should be labeled as high-risk. To permit the public to believe that any of the conditions in this category are not severe is to minimize the seriousness of these illnesses.

For other HCFA mortality categories exclusive of cardiac diseases, 51 percent of our patients were transfers from nursing homes, other hospitals, or through the Emergency Care Department. Medicare patients classified in non-cardiac categories who died had an average of 6.38 coexisting conditions or diseases. They were hospitalized an average of two times in their last year of life.

As a Catholic institution, we believe that quality is never an accident, but is the result of intelligent effort. We are committed to a quality assurance program that continually identifies opportunities to improve patient care. The care of all patients at SVCH&HC is reviewed regularly during their stay and any opportunity to improve the quality of care is implemented immediately and in accordance with established protocol.

We intend to keep our vigil and retain our patient's confidence in maintaining our fine record of quality. Throughout our history, Saint Vincent Charity Hospital and Health Center has provided quality care, concern, and assistance for all patients at all times and will continue to carry out its health care mission in a manner that reflects the philosophy of our founding sponsors, the Sisters of Charity of Saint Augustine.

Respectfully submitted,

D. D'Eramo

David D'Eramo, Ph.D.
President & Chief Executive Officer

Medicare Provider # 360037

St. Vincent Medical Center

ST. VINCENT MEDICAL CENTER
2213 Cherry Street
Toledo, Ohio

Medicare No. 36-0112

Response to the 1986 HCFA Mortality Study

Lawrence O. Leaman

Lawrence O. Leaman
President

2213 Cherry Street, Toledo, Ohio 43608-2691 419/321-3232

St. Vincent Medical Center is a 700 bed tertiary care Medical Center, located in the central city of Toledo, Ohio. Trauma and acute care is a central focus at St. Vincent, evidenced by seven intensive care units and services which include highly specialized physicians, nurses and other support staff.

The St. Vincent patient base is comprised of patients from Northwest Ohio and Southeast Michigan. Approximately 25% of our patient population is Medicare eligible. The location of the hospital accounts for a large population of low and no income patients who tend to have multiple diseases or illnesses.

The St. Vincent medical staff includes more than 600 specialized physicians. Numerous hospitals and physicians in the region refer to the Medical Center for tertiary, critical care.

Review of HCFA Data

St. Vincent Medical Center initiated an active Quality Assurance/Utilization Review Department (QA/UR) in 1980. Each month the QA/UR team of RNs and designated physicians meet to review the medical records of all mortalities.

The QA/UR team reviewed the HCFA data, concentrating their attention on a few specific categories, given time restraints and detail of information.

It is very important to remember when reviewing the HCFA information that the patient population included is between 65-100 years of age, which represents only 25% of the St. Vincent population.

Data Verification

1) Overall Data:

HCFA based its study on 3,265 Medicare admissions for 1986. Our records indicate 5,522 admissions for the same time period. HCFA stated that multiple admissions of a patient were listed as a single admission. So if a patient was admitted numerous times, with numerous diagnosis, only the final admission and diagnosis were included in the tallies.

The data used by HCFA indicated that a total of 305 Medicare patients admitted to SVMC hospital died within 30 days of admission. There were three (3) deaths reported as post-discharge incorrectly and one (1) additional date of death reported inaccurately. Sixteen (16) variations were discovered, and eight (8) cases of age classifications out of 86 cases reviewed -- which led to a 27% rate of error.

The 305 patients indicated in the HCFA study had been admitted at St. Vincent.

We fell within the predicted percentage range on all diagnostic categories. There were no large numbers of post-hospital deaths in any diagnostic category. The QA/UR team applied the HCFA generic screen to determine premature discharges and found that all discharges were appropriate.

2) Specific Categories:

(HS) and (SE) categories were specifically selected as the focus of our study because the percentages fell above the median.

Sepsis (SE) -- 10 deaths were listed, out of 19 patients. National statistics indicate that in cases of septic shock, expected mortality rates can exceed 50% in all age categories. Since this study focuses on the aging population, septic shock mortality would be expected to reach even higher proportions. In sepsis, often multiple co-mobidities (conditions) are also present.

Severe Accute Heart Disease (HS) -- 40 were inpatient deaths and 2 deaths post-discharge. St. Vincent is a tertiary care center which receives from other hospitals a high number of the very ill or injured patients. The HCFA study does not take into account the severity of illness at time of admission.

Of the 50 inpatient mortalities (SE and HS), all were listed in what HCFA admits to be HIGH RISK CATEGORIES. Patients came from the following sources:
   22% other hospitals (11 cases) **
   16% Life Squad (8 cases)
   16% ER direct admissions (8 cases)
   10% Extended Care Facilities (5 cases)
   36% elective/direct admissions (18 cases)
Sixty-four percent of the 50 admissions were admitted for acute care through the Emergency-Trauma Department.

**Another important factor to consider is the HCFA indication that any patient who died within 30 days of being transfered from another hospital would only be reflected in our data and NOT in the mortality data of the referring hospital.

3) Other:

When HCFA determined acceptable range percentages for each category, they set a maximum of four (4) co-morbidities per patient. They did not include an explanation of which four were used to determine the risk factor in range percentages for each patient. What seemed to be important was the following co-morbidities were not considered by HCFA:

Cardiogenic Shock	785.51
Acute Renal Failure	584.9
Pleural Effusion	511.9
Respiratory Failure	799.1
Pulmonary Edema	514

Tertiary care centers, which treat very critical patients, often find that their patient's face numerous categories of illness (co-morbidities) rather than one distinct illness.

Unique Services

Recognized Regional Tertiary Care Center
- In 1986, St. Vincent had one of the highest accuity levels (case mix index) for medicare patients of hospitals in our region.
- St. Vincent receives patients from 20+ hospitals, scene accidents and hundreds of physicians in the region.

High number of specialized physicians
- Every diagnostic category listed by HCFA has a corresponding speciality at St. Vincent.
- More than 600 physicians practice at St. Vincent in over 50 specialized services. Many are nationally recognized experts in their field of practice.

Northwest Ohio Heart Center
- Treats approximately 40% of the region's cardiac care patients
- In 1986, preformed more than 1,900 catheterizations, nearly 100 angioplasties, nearly 450 open heart surgeries, and treated nearly 4,000 patients in the vascular lab.
- Due to the specialized care available, the Northwest Ohio Heart Center is the major referral center for cardiac care from the 19 counties in Northwest Ohio and lower Michigan.

Life Flight/Emergency-Trauma Department
- The region's major referral center for severe illness or injury, seeing more than 35,000 patients a year through the Emergency-Trauma Department.
- Life Flight responds to 25% scene runs and 75% inter-hospital transfers with over 800 flights per year -- serving a 130-mile radius.
- 45% of Life Flights runs are cardiac related, 40% are trauma related and 15% are other types of critical illnesses or injuries.

Regional Burn Care and Reconstructive Center
- The region's only Burn Care Center and the nation's sixth regional facility in the country.
- Treating more than 2,000 men, women and children since its inception in 1967.

Summary

All admissions in the HCFA data were verified as occurring at St. Vincent Medical Center. In reviewing this data it is important to keep in mind that patients transferred from hospital "A" to hospital "B" will only be credited to hospital "B". Often previous admissions, whether to this or other institutions, can shed a light on the disposition of the patient.

Socio-economic status, medical history, condition at time of admission and numerous other indicators of severity of illness must be considered by HCFA for inclusion in future studies of predictable mortality in order to draw valid conclusions from this information.

As a Catholic institution, St. Vincent Medical Center has always been committed to providing care to people of all socio-economic levels. We are pleased that this study has reinforced that the quality of care at St. Vincent is very high, given the accuity levels of our patient mix. Overall, the hospital's actual mortality rate falls within the lower ranges of the predicted mortality rate.

The study's importance is that it allows healthcare institutions the ability, as intended and stated by HCFA, "to better focus quality assurance activities" but should not be used as a tool to judge quality of care.

ti/10-28-87

ST. VINCENT MEDICAL CENTER

HCFA MORTALITY DATA

Needs reported to HCFA that four (4) date of deaths incorrect:

Hosp.Ins.Claim #	Last Name	Diag. Code	Age	Sex	Admission Date	Correct date of death
[redacted]	[redacted]	PN	80	M	12-12-86	12-26-86
[redacted]	[redacted]	HM	68	F	9-8-86	9-23-86
[redacted]	[redacted]	CE	76	M	7-29-86	8-7-86
[redacted]	[redacted]	HL	85	M	6-27-86	7-19-86

STOUDER
Memorial Hospital

A family kind of caring

October 12, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

RE: Medicare Mortality Data, Medicare Provider #360174

Dear Dr. Roper:

The overview statistics for our hospital show that our mortality rates by diagnostic categories all fall within the predicted ranges. The predicted ranges vary from 7 to 100 percentage points and it would seem that the broad ranges offer little if any significant comparison value.

However, within the diagnostic category Metabolic and Electrolyte Disorders (ME), three of the four records listed show that patients died shortly after hospital discharge. On investigation, two of these had terminal cancers and the other had terminal lung disease. Uninvestigated, it might incorrectly suggest that the metabolic or electrolyte disorder was not adequately managed. In reality, their deaths were due to their underlying illness, not reflected in the diagnostic category determined by their admission diagnosis, dehydration.

Also, by categorizing patients by primary admission diagnoses, two quite elderly patients were listed as having "low risk heart disease' (HL) not reflecting their age risk or their documented multiple health problems.

Investigation of the sixteen in the "unknown" category (UN) showed that four had known cancers and in most of the others, acute cardiovascular or pulmonary events were suspected based on their clinical presentations. The "unknown" term is puzzling as used in this information. This listing would seem to be of minimal benefit in assessing quality of care in an institution.

Sincerely,

J. Nickras
Judith G. Nickras, M.D.
Director, Quality Assurance, UVMC

James O Detwiler
James O. Detwiler
Campus Administrator

jm

920 Summit Avenue • Troy, Ohio 45373 • (513) 335-0011

October 12, 1987

Dear Dr. Roper:

Please note that patient [redacted] expired 1/16/86 not 1/17/86.

Also, patient [redacted] was discharged on 6/27/86 not 6/28/86.

Thank you.

Janet Mullins
QA Coordinator
Stouder Memorial Hospital

KETTERING MEDICAL CENTER
3535 Southern Boulevard Kettering, Ohio 45429-1298 513 298-4331

October 16, 1987

William L. Roper, M.D.
Administrator
Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

RE: Sycamore Hospital Medicare Provider Number 36-0239

Enclosed is Sycamore Hospital's response to HCFA's planned publication of mortality statistics for medicare patients.

Please include these comments with the information when it is published in December. Sycamore Hospital appreciates the opportunity to examine the data in advance and to make these comments.

Sincerely,

Arthur Caviness
Vice President of Marketing & Planning

ARC:ts

Kettering Memorial Hospital Sycamore Hospital Kettering College of Medical Arts

KETTERING MEDICAL CENTER
3535 Southern Boulevard Kettering, Ohio 45429-1298 513 298-4331

SYCAMORE HOSPITAL'S RESPONSE TO PROPOSED PUBLICATION OF HCFA 1986 MORTALITY DATA

Sycamore Hospital Medicare Provider Number 36-0239

Sycamore Hospital mortality rates were within the predicted range in all 17 categories, however, hospital management wishes to comment on three things:

1. Errors in the data
2. Shortcomings in the methodology
3. Caution to readers

Errors in the Data

Medical Records show that 1 patient listed as having died at Sycamore Hospital on the day of discharge (the usual indication of a hospital death) was not a Sycamore patient at that time. HCFA data on this patient is attached. Of even more concern to us is a possibility that patients who were discharged alive may have been omitted from the total number of cases in a particular category. This would result in a much higher mortality rate than actually occurred. Evidence of such omission was found at an affiliated hospital and there is a possibility that this type of error also occurred at Sycamore Hospital.

Shortcomings in Methodology

HCFA has attempted to adjust predicted mortality rates at individual hospitals depending on patient's age, sex, comorbid conditions, etc. No attempt was made to measure severity of illness, so the predicted figures are less "customized" than they appear.

HCFA's decision to include out of hospital deaths within 30 days of the last hospital admission brings confusion to the interpretation of these mortality statistics. In the vast majority of cases it is not feasible to track down these out of hospital deaths and learn whether or not they had anything to do with the hospital admission or not. With its methodology HCFA is telling the community that these deaths indeed are "chargeable" to the last hospital that cared for this patient, when in fact there may be no relationship. Also massive double counting is possible for December 1986 hospitalizations that show January 1987 deaths. These January deaths, if they occurred in a hospital after a January 1987 admission, will count in next year's HCFA mortality report!

Another error, or potential error, involves medicare patients with a diagnosis of "acute edema of lung, unspecified." In the nationally recognized ICD-9 catalogs, this goes by the code number, 518.4.

Department of Health and Human Services material indicates patients with this diagnosis will appear in two separate categories in the mortality tables being released. The two categories are severe chronic heart disease and pulmonary disease. Obviously these deaths should not be counted twice.

Caution to Readers

Newspapers are expected to publicize these mortality statistics. Headlines may imply that the printed mortality rates for each hospital apply to that hospital's entire patient population. Do not be misled in this regard. These figures apply only to a specialized high risk medicare population.

In Sycamore Hospital's severe acute heart category, 92% of the patients who died were age 70 or older. The condition of these patients is far different from a similar group of Sycamore Hospital patients who might be 30 years younger. A 48 year old man with chest pain coming to Sycamore Hospital's emergency department by ambulance should be assured that his chances of survival are far higher than those of the typical severe acute heart patient in this HCFA report.

SYCAMORE HOSPITAL MEDICARE PROVIDER NUMBER 36-0239

Patient ID Number	Surname (First 6 Letters)	Diagnostic Category	Age	Sex	Date of Admission	Date of Discharge	Date of Death
[redacted]	[redacted]	CA	069	F	07/31/86	08/03/86	08/03/86

The Toledo Hospital

October 27, 1987

Medicare provider
number: 360068

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

This is in response to the Health Care Financing Administration (HCFA) plan to publish selected mortality information about all short term acute care hospitals that treated Medicare patients in 1986.

The Toledo Hospital is an 814-bed, acute care, not-for-profit, regional referral center, affiliated with a medical school and treating the full spectrum of diseases up to but not including organ transplant programs. The Toledo Hospital projects that in 1987 it will provide $5.5 million in charity care.

Our institution engages in extensive quality review activities. The hospital performs concurrent review of our total in-house population on a daily basis. It has a pre-admission certification center that evaluates patients for severity of illness and need of admission to the acute care facility. The hospital utilizes retrospective computerized review program (MedisGroups) that identifies variations in severity of illness by diagnosis and/or diagnosis related group (DRG). This system also allows the hospital to identify resource use and physician practice patterns by individual physician and medical staff department. The system also allows us to compare the hospital with other institutions in the MedisGroups program regarding length of stay, DRG performance, medical staff performance, disease outcomes, etc.

It is difficult for The Toledo Hospital to comment on the HCFA statistics because there is no way of knowing if the data is accurate. It would be helpful to examine this information on a case by case basis. The difficulty of assessing the accuracy of this information is particularly true in cases of deaths within 30 days postdischarge. The hospital assumes that these deaths, in general, were expected and planned for, but it has no way of determining this with certainty given the HCFA format.

It is important to note that an appropriate assessment of hospital performance depends on many variables and requires a detailed evaluation of many quality indicators. Meaningful mortality statistics would need to adequately account for severity of illness, an area in which the HCFA data are lacking.

Sincerely,

John J. Newton, MD

John J. Newton, M.D.
Director of Medical Affairs

2142 North Cove Boulevard Toledo, Ohio 43606

TRUMBULL
MEMORIAL HOSPITAL 1350 EAST MARKET ST. WARREN, OHIO 44482. PHONE (216) 841-9011

CHARLES A. JOHNS
Executive Director

October 8, 1987

William L. Roper, M.D.
Administrator, Health Care
Financing Administration
Department of Health
and Human Services
Washington, D.C. 20201

Medicare Provider Number: 360055

Dear Dr. Roper:

We have carefully reviewed the mortality information you recently provided and we were pleasantly surprised to find the material was accurate. In anticipation of the December release of this information to the general public, I am wondering how you intend to release this information to our local media.

Sincerely,

Charles A. Johns
Executive Director

CAJ/cjm

VHA. Member of Voluntary Hospitals of America, Inc.

TWIN CITY HOSPITAL
E. A. Roberto, CEO
CH
First and Fuhr Streets, Dennison, Ohio 44621
614/922-2800

October 12, 1987

William L. Roper, MD-Administrator
Health Care Financing Administration
PO Box 26684
Baltimore, Maryland 21207

RE: 1986 Hospital Mortality Information

Dear Sir:

On behalf of Twin City Hospital (ID# 360057), please note the following comments regarding our mortality statistical information received:

1) An increase in mortality may be due to DNR(do not resusitate) decisions which are the privilege of the patient/family.

2) Also, this data does not reflect those patients which have a strong familial historical background for severe chronic heart disease thus explaining hereditary factors.

3) Severity of illness at the time of admission is not reflected.

4) The fact that a hospital is located in an Appalachian region with more retired/elderly is also not considered as an explanation regarding the potential for a higher risk of mortality among the diagnosis of severe chronic heart disease.

5) The primary most common diagnosis for hospital #360057 includes ICD-9-CM code 428.0 which is included in the severe chronic heart disease category by HCFA and therefore would account for a slightly higher percentage of mortality due to the fact that the above hospital treats more of these cases which is known as being a major complication for many elderly with heart disease, no matter where the location. Also, the ICU/CCU occupancy ration for this hospital reflects a much higher useage than anyother unit within the facility.

Respectfully submitted,
Cheryl Hicks, ART
Cheryl Ann Hicks, ART
Quality Assurance Coordinator

CC: Mr. Roberto, CEO
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UNION
HOSPITAL

659 BOULEVARD DOVER, OHIO 44622 (216) 343-3311

COMMENTS ON HCFA MORTALITY DATA
UNION HOSPITAL - DOVER, OHIO
OCTOBER 26, 1987
MEDICARE PROVIDER NO. 360010

Mortality rates, by themselves, do not measure quality. Mortality data are appropriately used to guide or focus peer review. Quality can only be evaluated through the process of peer review - not through simplistic statistical comparison. Because mortality data are easily misinterpreted, they can cause confusion and apprehension among Medicare beneficiaries and the public in general.

The HCFA mortality data will be used principally by Union Hospital to identify or suggest areas for review. The mortality data do not identify areas in which the hospital provides "high quality" or "low quality" care or otherwise measure hospital performance. The real issue is the way the data are used. HCFA administrator, William Roper, M. D., has said he intends the data to be used in hospital quality assurance programs. At Union Hospital, quality of care is of the utmost concern to the governing board, management and medical staff. Any indication of potential quality problems, including a mortality rate that is higher or lower than predicted, leads to a prompt investigation to determine if a problem, in fact, exists. When quality problems are identified, action is swiftly taken following investigation and review.

Union Hospital supports consumer access to valid and useful information on the quality of hospital care. While comments on the methodology will be held to a minimum, several "technical" comments on the HCFA data are appropriate. The principal "technical" issue is that the ability of the model to detect differences in quality has never been evaluated. The HCFA data assumes that each hospital's patients are "average" except with respect to the few characteristics included in the statistical model: Principal diagnosis, the presence of certain selected complicating illnesses, the patient's sex and age, the number of times the patient was admitted to the hospital during the preceding twelve months, and whether the patient was transferred from another hospital. The model does not include measures of severity (i.e., how ill the patient was at the time of the admission), whether the patient was transferred to the hospital from a nursing home, whether the patient was receiving treatment at the home prior to admission, whether the patient had a terminal illness, or the patient's psychological state or general health status.

As a result, hospitals treating unusually large numbers of severely ill patients (e.g., referral hospitals) or with specialized programs for the terminally ill may have higher than predicted mortality rates. Several kinds of patients that are admitted to Union Hospital differ from the "average" Medicare patient. Union Hospital is a Rural Referral Center hospital in the Medicare Perspective Payment System. There is a very active oncology service with Cancer patients receiving chemotherapy and the terminally ill receiving the services of the hospital based Hospice. The recruitment of new specialists in internal medicine and cardiology have made more services available to patients with Severe Acute Heart Disease and Pulmonary Disease. The hospital is treating a large percentage of severely ill patients with a high proportion of admissions through the Emergency Department and from nursing homes. In focusing analysis on those categories in which there are significant number of patients (e.g., more than one hundred) and in which the actual mortality rate falls outside the range of the predicted mortality rate, four categories are pinpointed: (1) Gastrointestinal Disease and (2) Low Risk Heart Disease are over one hundred cases but well within the range of predicted mortality rates. (3) Pulmonary Disease is in the upper quartile of the range and (4) Cancer is outside the range. Both are explained above.

The HCFA data are not all-inclusive. The mortality rates apply only to Medicare patients and differ from other indicators of inpatient mortality because they are calculated using only deaths that occurred within thirty days of the last admission of a Medicare beneficiary to a hospital during 1986. It should also be mentioned that the American Hospital Association, the Joint Commission on Accreditation of Healthcare Organizations, and the Voluntary Hospitals of America are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. Union Hospital looks forward to the results of these efforts to better meet the needs of our public with improved quality measures.

The most important point Union Hospital wants to make - and to reiterate - is the value we place on the quality of the care we provide. Death is only one of many outcomes of treatment and mortality review is only one of several important components of a comprehensive quality control program. Effective quality control programs are designed to enhance patient safety, promote appropriate utilization of resources, and reduce the probability of preventable adverse clinical outcomes. We will continue to develop our ability to demonstrate comprehensive and systematic review and evaluation of the quality of care provided by Union Hospital in the belief that it is the best way of dealing with the disclosure of data that can be so easily misinterpreted. We offer the community the assurance that opportunities for improving patient care are being identified and acted upon.

William W. Harding

William W. Harding
President and Chief Executive Officer

WWH/dsf

University of Cincinnati
Medical Center

University of Cincinnati Hospital

Office of the Administrator

234 Goodman Street
Cincinnati, Ohio 45267-0700

October 23, 1987

William L. Roper
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: HCFA Mortality Information

Dear Dr. Roper:

The University of Cincinnati Medical Center is a major teaching medical center with 728 inpatient hospital beds, a Level I Trauma Center and a significant outpatient, ambulatory program. The Medical Center serves a large geographic region and a population of patients many of whom present with multiple and complex problems.

The University of Cincinnati Medical Center is within the Health Care Financing Administration's Range of Predicted Mortality for each Diagnostic Category in the Mortality Report and overall for all Medicare patients treated by the Medical Center in 1986. However, the Medical Center believes it is important to comment upon the fact that it is very misleading to use a single indicator such as mortality as a measure of the quality of service provided to Medicare patients.

The first reason for this position is that no single indicator is an adequate reflection of care provided by a Medical Center with a Level I Trauma Center that serves a geographic region and a population of patients similar to the Medical Center. Two of the diagnostic categories profiled (severe trauma and sepsis) in the HCFA report, illustrate this point.

Of the nine deaths in the severe trauma category, three involved extremely moribund patients who were transferred from outlying facilities (2 by air ambulance) where the only hope for patient survival was transfer to a Level I Trauma Center. In spite of extremely competent care, these patients could not be saved. Without the transfer, there was little or no liklihood of survival.

Three other deaths in the severe trauma category involved severely burned patients brought to the Medical Center following burn injury. In all three cases, the prognosis for survival was virtually non-existent because of the extent of burn injury. In all three cases, after consultation with patient and family, only comfort measures were provided.

Of nine deaths in the sepsis category, four resulted from elderly patients brought to the Medical Center from home or from nursing homes with multiple, complex medical problems and already septic. The sepsis was an outgrowth of the complex, underlying medical problems and, because of the underlying problems and age, the probability of successfully treating the sepsis was extremely small.

The point of these examples is to illuminate the role a Medical Center plays, the kind of patients it serves and how misleading it is to assess whether it serves its patients well based upon one measure.

The second reason for the Medical Center's position is that, while patients do meet HCFA's technical definitions for a diagnostic category, many of these patients do not fit within commonly held perceptions of what is thought to be included in a diagnostic category. Consequently, it is very misleading in many instances to use mortality as a measure of the quality of care provided by a facility to patients in a particular diagnostic category. Again, both the severe trauma and sepsis categories illustrate this point.

Of deaths in the Medical Center's trauma category, one resulted from an elderly patient who fell in her home and who was brought to the Medical Center forty-eight hours after the fall because of progressive neurologic deterioration which proved to be irreversible. This kind of event hardly fits into anyone's notion of severe trauma but is intended to be a reflection of how well the Medical Center handles severe trauma.

Another death in the severe trauma category resulted from a patient with a fractured hip that required internal fixation. During the admission, it was discovered that the patient had an inoperable brain tumor. Because of this latter condition the patient was transferred to a nursing home where it is presumed the patient died of the brain tumor.

Of the sepsis deaths, three involved patients who had an underlying diagnosis of cancer. Sepsis is one of the ways cancer patients die but death as a result of sepsis in a cancer patient is not terribly indicative of how well a facility treats sepsis.

The Medical Center believes that the above two deaths in the severe trauma category and the last three deaths above in the sepsis category should not be included in these respective categories and requests that HCFA remove them from these diagnostic categories. To leave them in these categories misleads the public.

In closing, the Medical Center believes that if HCFA is to continue publishing mortality information it must take more seriously the implications of this information and the agency's responsibility to educate the public about the meaning of the information. In our opinion HCFA does not serve the interests of Medicare patients well by releasing information with the implication that it is a precise measure of quality when it takes a good deal of expertise to properly understand the data and use it to make an informed choice about health care.

Jack Gluckman, M.D.
Chief of Staff

Carl Iseman
University Hospital Administrator
Medicare No.: 36-0003

cc: Donald C. Harrison, M.D.
Senior Vice President and Provost for Health Affairs

University Hospitals
of Cleveland
2074 Abington Road
Cleveland, Ohio 44106
216-844-3815

James A. Block, M.D.
President and
Chief Executive Officer

Lakeside Hospital
Rainbow Babies & Childrens Hospital
MacDonald Hospital for Women
Leonard C. Hanna House
Howard M. Hanna Pavilion
George M. Humphrey Building
Robert H. Bishop Building
Abington House
Wearn Medical Research Laboratories
Harry J. Bolwell Health Center
University Hospitals Health Center/East
University Suburban Health Center

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Attention: William L. Roper, M.D.
Administrator

Re: 1986 Mortality Report

Dear Dr. Roper:

The report has been reviewed from two points of view; we assessed the accuracy of the information received and each patient included in the report will have had their hospitalization examined by December of 1987 in order to review the diagnoses and determine the cause of death in each case. For most of these patients, this will represent the second medical review of their hospitalization, since all hospital deaths are peer reviewed concurrently as part of the hospital-wide quality assurance program. Because of the importance attached to these reports by the government and the news media, we believe a second review is appropriate.

The report contains errors. None of the errors encountered would appear to alter the significance of the figures as presented except for the total count of 1986 Medicare patients. HCFA has recorded 3,247 Medicare patients admitted during 1986. Our hospital records indicate that 4,602 Medicare patients were admitted, excluding our exempt psychiatric and pediatric facilities. However, an increase in the size of the denominator might be expected to lower the mortality rates as expressed by HCFA We cannot recalculate the statistics for each group of our patients with the limited information supplied by HCFA.

The Health Care Financing Administration is to be commended for its sophisticated approach to a better understanding of the mortality rates of those patients for whom in large part, it is financially responsible. The methodology used appears to be statistically correct. We agree that mortality is one reasonable generic screening device and use it in our own quality assurance program. The eleven or so variables used by HCFA for determining expected mortality are but a few of many factors which determine the severity of a given illness and predict its outcome. In particular, the natural history of a specific disease process is a critical consideration. A tertiary care hospital such as University Hospitals of Cleveland often receives patients late in the course of their illness when routine measures of therapy are no longer effective. The reason for admission may still be the same as with earlier hospital admissions several years prior to the HCFA review but the course of the illness has taken its toll and the predicted outcome is less favorable.

Currently there is no single methodology which can be considered valid for evaluating the quality of care delivered to a group of patients and which will predict the outcome. A number of promising approaches are under investigation in hospitals and medical schools throughout the country, including University Hospitals of Cleveland. It would seem reasonable to encourage hospitals to test various methodologies and to develop new ones. It is impractical to consider that HCFA will ever have access to the detail that is needed to evaluate the quality of complex care with information derived from its billing system. We believe the public should expect and receive an accounting of the quality of care delivered by all providers of health care. We also believe the responsibility for this accounting lies with the medical profession and the hospitals which provide the facilities to care for patients.

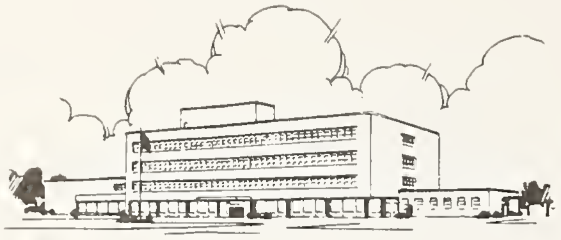
University Hospitals of Cleveland is an 874 bed medical center serving its community and the nation through patient care, research and teaching. United under one management are its five specialty hospitals: Lakeside and Hanna House for adult medical-surgical care; MacDonald Hospital for Women; Rainbow Babies and Childrens Hospital; and Hanna Pavilion for psychiatric care. The Ireland Cancer Center coordinates the institution's comprehensive approach to cancer treatment for both adult and pediatric patients. Affiliated with Case Western Reserve University's School of Medicine, Nursing and Dentistry, University Hospitals and its academic counterpart form Ohio's largest biomedical research center.

Sincerely,

James A Block MD

James A. Block, M.D.
President & Chief Executive Officer

JABs



The Van Wert County Hospital
1250 South Washington Street
Van Wert, Ohio 45891
419-238-2390

October 27, 1987

Attention: Manager
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
Room 132 - East High Rise Building
6325 Security Boulevard
Baltimore, Maryland 21207

Dear Sir:

The purpose of this letter is to respond to the information provided by your office on September 21, 1987. The information relates to the selected mortality information of all short-term, acute-care hospitals.

Van Wert County Hospital, Medicare provider #36-0071, would like to submit the following information for publication:

> This information is being submitted following review by the Utilization Review Committee, the Medical Division, and the Surgical Division of Van Wert County Hospital. Noted were the following:
>
> 1) Average age for cases included in the study = 80.28.
>
> 2) Median age for cases included in the study = 80.
>
> 3) All in-hospital deaths are reviewed on a continuing bases per pre-established criteria addressing the quality of care received. All such cases included in this study had been reviewed and were found to meet acceptable medical practices for the documentation, progression, and outcome of the cases.
>
> 4) Census statistics for the geographical location of Van Wert County Hospital show high concentration of Medicare age population. Correlation to be made here would be greater incidence for death when compared to a population census with lower age population concentration.
>
> 5) Patterns shown by those cases included in this study show high percentage to be end-stage disease care with the illness, severity of disease to be consistent with advanced age and/or irreversible illness of a major organ system.
>
> 6) Several cases of "end-stage disease" are noted. Geographical location of Van Wert County Hospital allows for cases to be treated in a hospital setting out of the area, and the patients then returning to their home/hometown setting/hospital (Van Wert County Hospital) for their end-stage care.

7) In-depth review was given to those cases expiring within 30 days after discharge. Comparison was given to diagnoses causing the admission/ treated during the hospital stay versus the cause of death listed on the death certificate. Deaths after hospital discharge did not show patterns identifying cause of death to be related to conditions treated during the hospital stay in several cases.

8) Basic statistical information shown in this study for Van Wert County Hospital is correct with the exception of two cases showing incorrect date of death. Death did occur during the patient's hospitalization rather than within 30 days following hospital discharge.

Sincerely,

Jon M. See
President

JMS/jb

Vh
Veterans Memorial Hospital
community service

I.D. # 360200

October 27, 1987

Dear Reader:

Important information to consider when reviewing the Veteran's Memorial Hospital mortality statistics provided by the Health Care Financing Administration (HCFA) include:

1. Veterans Memorial Hospital is a rural hospital located in Southeast, Ohio. The hospital does not have the resources for the medical specialties nor the technology that larger hospitals are able to afford. The statistics do not reflect this consideration.
2. The two patients listed with principal diagnoses of sepsis, were admitted to our hospital from an extended care facility. These patients came to the hospital with a history of an infection. One patient expired the same day of admission and the other patient presented with severe complications. These are two examples that illustrate the importance of the severity-of-illness factor when evaluating data. The lack of severity-of-illness adjustments distorts the data presented.
3. The range of the patients' ages are 69 - 97 years of age. The average age of the patients listed is 82 years old.
4. Of the 56 deaths listed, 21 percent occurred after the patients' discharge from the hospital.
5. The smaller number of admissions within our hospital, compared to larger hospitals, have a greater impact on the reported results.

Many variations of the data reported by HCFA have not been accounted for. The five points mentioned above are only a few examples of those variations.

W.S. Lucas

W.S. Lucas
Administrator

Margaret Holm

Margaret Holm
Assistant Administrator

115 E. Memorial Drive • Pomeroy, OH 45769 • (614) 992-2104

THE WARREN GENERAL HOSPITAL ASSOCIATION
An Osteopathic Community Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

We have completed a careful review of the HCFA mortality information about Medicare patients treated in Warren General Hospital in 1986 which you forwarded to this office with your letter of September 21, 1987. Our comments follow in the text of this letter.

According to the Hospital's research, the mortality rate for Medicare patients is 11%, not 13% as reported by HCFA. HCFA's "actual mortality rate" is calculated by dividing the 151 Medicare deaths by HCFA's count of 1,136 Medicare "patients admitted" to Warren General Hospital in 1986. The Hospital, using the same methodology, has calculated its mortality rate to be 11%. The discrepancy results from a difference in denominators used in the calculation; the numerator, 151 deaths, has been verified by the Hospital, and remains unchanged. According to Hospital records, there were 1,875 Medicare admissions during 1986. Five hundred sixty (560) of these admissions were readmissions - that is, multiple admissions of the same patient during 1986. Thus, the Hospital's count of patients admitted is 1,315 (1,875 admissions less 560 readmissions), which is substantially greater than HCFA's count of 1,136. Since HCFA reports only patients admitted, the Hospital is unable to speculate whether the discrepancy relates to HCFA's count of admissions, readmissions, or both. In any event, this larger denominator results in a lower calculated mortality rate (151 - 1,315 = 11%).

Further information about the characteristics of the 151 Medicare patients who HCFA reports died within 30 days of their last admission of 1986 to Warren General Hospital is informative. Such information can be considered on an overall basis and as it applies to the 17 diagnostic categories which HCFA has selected.

A breakdown of total deaths by age of patient, source of admission, and status at discharge from the Hospital is presented below:

Age of Patient	#	%
Under 65	3	2%
65 - 74	53	35%
75 - 84	60	40%
85 - 94	27	18%
95 +	8	5%
Total	151	100%

Source of Admission	#	%
Home	93	62%
Nursing Home	55	36%
Rehabilitation Hosp.	2	1%
Acute Care Hospital	1	1%
Total	151	100%

Discharge Status	#	%
Died in Hospital	127	84%
Alive to Nursing Home	18	12%
Alive to Home	6	4%
Total	151	100%

Average Age 78

667 EASTLAND AVENUE S.E./WARREN, OHIO 44484/TELEPHONE 373-9000

Two aspects of the data listed above are particularly pertinent to the Hospital's mortality rate. A substantial portion (36%) of the Medicare patients who died within 30 days of their last admission in 1986 were admitted from nursing homes in the area. Many of the patients who died (23%) were 85 years of age or older. Typically, patients with the aforementioned characteristics have chronic conditions in addition to an acute problem which necessitates hospital admission, a factor which adversely affects their mortality rate. This profile meshes with the strong family practice specialty characteristic of the Hospital's medical staff. Many staff physicians serve as Medical Directors of area skilled nursing facilities.

The Hospital wishes to supply additional information about the characteristics of the patients in five specific HCFA diagnostic categories. In each instance, we believe that the information is useful in interpreting the relationship between HCFA's reported "actual mortality rate" and HCFA's "range of predicted mortality rates" for that diagnostic category at Warren General Hospital.

HCFA reports a Hospital mortality rate of 64% for the Sepsis diagnostic category (9 deaths, 14 patients), a rate 1% above the high end of the predicted range. Sepsis is an infection of the blood which is not uncommon among the frail elderly. All nine patients who died had one or more complicating conditions: heart disease (7), stroke (4), emphysema (4), and diabetes (2). In five cases, the patient or the patient's family requested that no heroic measures be taken to sustain the patient's life. Eight of the patients were admitted from nursing homes, and two were discharged alive to nursing homes. The average age of the patients in this category was 80.

For the Severe Chronic Heart Disease diagnostic category (28 deaths, 81 patients), HCFA reports a Hospital mortality rate of 35%, a rate equal to the high end of the predicted range. The average age of these patients was 78. All of the patients in this category either had some other chronic health problem (emphysema - 11, diabetes - 10, cancer - 4, kidney failure - 3), or had previously had a heart attack (6). One quarter of the patients who died were admitted from nursing homes.

HCFA predicts a range of mortality rates from 24 to 52% for the Severe Acute Heart Disease diagnostic category and reports a Hospital mortality rate of 43% (20 deaths, 47 patients). Six of the 20 patients who died were brought to the Hospital emergency room in cardiac arrest. Most of the patients either had one or more complicating chronic conditions (coronary artery disease - 7, emphysema - 5, diabetes - 2), or had previously had a heart attack. The average age of patients who died was 79.

The range of predicted mortality rates in the Urologic Disease diagnostic catergory is 2 to 17%. HCFA reports an actual mortality rate for the Hospital of 15% (9 deaths, 60 patients). Seven of the nine patients who died were admitted from nursing homes, and all seven had multiple chronic disorders. Four of the nine deaths took place after the patient was discharged to a nursing home. The average age of the patients who died was 79.

HCFA reports a Hospital mortality rate of 7% in the Low Risk Heart Disease diagnostic category (8 deaths, 108 patients), and predicts a range of mortality rates from 2 to 10%. Two of the eight patients who died were admitted from other hospitals. One had had a stroke at a rehabilitation hospital, and another was returned to Warren General Hospital at the family's request after an evaluation at another hospital ruled out the feasibility of dialysis treatment for kidney failure. Three of the patients who died were admitted from nursing homes. In two of these cases, the patient's family decided not to have a pacemaker implantation performed. In the third case, the family requested no heroic measures be taken to sustain the patient's life. Of the three patients admitted from home, one had a history of emphysema, one a history of heart disease, and the third refused to be placed in the Hospital's cardiac unit as recommended by the physician managing treatment.

In summary, the patients who died in the aforementioned five diagnostic categories were, in most cases, afflicted with one or more complicating chronic condiitons which jeopardized their chances for recovery. In a number of cases no heroic measures were taken to sustain the patient's life at the request of the patient or the patient's family.

We appreciate this opportunity to comment on HCFA mortality statistics. Unfortunately, since the Warren General Hospital count of 1986 Medicare patients admitted is understated by 14% (1,136 reported by HCFA versus 1,315 actual patients admitted per 100% check of Hospital records), it is difficult to interpret the reported results. We would be pleased to share our data in the event HCFA wishes to correct its computer data base of 1986 patient admissions.

Very truly yours,

Roy D. Pilasky
President

RDP/ss

SERVING YOU

Willard Area Hospital, Inc.

110 E. Howard Street,
Willard, Ohio 44890
419/933-2931

360063

Formal comments to HCFA

The figures do not reflect the severity of illness or the complexity of the case.

The figures do not relect if the patient has a chronic or terminal illness.

No statistical analysis is done to demonstrate whether or not the numbers are significate.

Small hospitals case numbers are so small, statistics are ascured.

The percents do not reflect the age of community or the porportion of nursing home patients in a city in comparison to the general population.

The percents do not reflect if the patient came from the rest home.

Statistics could reflect deaths in another facility on our statistical report because of reviewing deaths 30 days after discharge.

A better measure for evaluating hospitals for the public is needed.

WM Wilson Memorial Hospital

October 15,1987

Health Care Financing Adminstration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 266684
Baltimore, Maryland 21207

Dear Sir,

Enclosed you will find our data verification and comments on the 1986 mortality data for Wilson Memorial Hospital. There are several discrepancies which should be corrected prior to publication of the data in December. The changes are outlined on the following pages.

Sincerely,

Michael Ehler

Michael Ehler
Executive Director
Wilson Memorial Hospital

Hospital Medicare Provider # 360013

915 West Michigan Street • Sidney, Ohio 45365

Wilson Memorial Hospital

DATA VERIFICATION

A verification of the HCFA mortality data received by Wilson Memorial Hospital revealed the following:

Total number of Medicare cases reported:

HCFA	793
* Wilson Memorial	924

* These numbers include only the final admission in 1986 if the patient had numerous readmissions. See the enclosed list for verification. This computer printout includes all discharges from Wilson Memorial Hospital from January 1, 1986 to December 31,1986, however multiple visits were counted as only one discharge. The circled patients are deaths and the numbers after the name are cases. PLEASE ADJUST THE PERCENTS IN ALL DIAGNOSTIC CATEGORIES TO REFLECT THIS HIGHER BASE. (I.E. ALL CAUSES FROM 16% TO 13%, METABOLIC/ELECTROLYTE DISTURBANCES FROM 29 % to 26%)

Total number of deaths within 30 days of admission:

HCFA	123
Inpatient	92
Post hospitalization	31
Wilson Memorial	122
Inpatient	95
Post hospitalization	27

The following list is for correction only, not for publication. The HCFA data lists these patients as deaths after discharge from Wilson Memorial Hospital, when in fact they were inpatients at the time of death. PLEASE CORRECT THE DATES OF DEATH TO REFLECT THE FOLLOWING:

[redacted]	adm 12-17-86	dis 12-18-86	date of death 12-18-86
[redacted]	adm 12-11-86	dis 12-17-86	date of death 12-17-86
[redacted]	adm 7-21-86	dis 7-30-86	date of death 7-30-86

This patient was transferred to Miami Valley Hospital, Dayton, Ohio, and therefore his death should not be attributed to Wilson Memorial Hospital. PLEASE MAKE THE FOLLOWING CORRECTION TO REMOVE THE PATIENT FROM THE HCFA MORTALITY LIST AS A DEATH.

[redacted] adm. 12-27-86 dis 12-29-86 date of death 1-20-87

Wilson Memorial Hospital

INTERPRETIVE REMARKS

The Health Care Financing Adminstration has released statistics showing the actual number of Medicare patients who died within 30 days of their last admission of 1986 and a predicted range of the risk of death of the same type patient nationwide. In all of the diagnostic categories, Wilson Memorial Hospital's actual rate was well within the limits predicted by HCFA. A careful review of the medical records revealed the patients in three high risk categories were at an advanced age at the time of death. In the severe trauma category the average age of the patient at the time of death was 84 years of age. The average age at the time of death in the cancer category was 75 years of age. In the third category of severe chronic heart disease, the average age at the time of death was 83 years of age. Age alone is not an indicator of death, but when it is combined with a serious disease, age is an important factor. This data provides a beginning point for the analysis of Wilson Memorial Hospital's specific mortality rates.

The HCFA mortality data has limitations. This model does not consider a patient's severity of illness. There are a wide range of factors with significant impact on mortality that are not considered. Some of the diagnostic categories were based on numbers of less than thirty discharges. The smaller the number, the less reliable are the statistics. Further, only Medicare cases were reviewed.

Wilson Memorial Hospital is committed to quality care in its efforts to meet the needs of the community. Statistical data is important when it is properly interpreted. The release of the HCFA mortality data will be used by Wilson Memorial Hospital for ongoing studies in quality of care.

915 West Michigan Street • Sidney, Ohio 45365

PERSONALLY WE CARE...
PROFESSIONALLY WE SERVE
WOOD COUNTY HOSPITAL

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Dear Doctor Roper:

The purpose of this letter is to comment on the Mortality Report generated by HCFA. Please find enclosed the corrections on the data from our records. These corrections are on six of the patients identified and are very simple in nature. Two include the age of the patient, one is a correction on the spelling of a patient's name, two are changes in the principal diagnosis, and the last one includes changes in the diagnostic category, date of admission and discharge, and the principal diagnosis. We are impressed with the overall accuracy of your report.

Thank you for your attention to these comments.

Sincerely,

Michael A. Miesle

Michael A. Miesle
Administrator

MAM/vm
Enc:

950 West Wooster Street, Bowling Green, Ohio 43402. Phone 419/352-6571

FOLLOWING ARE CORRECTIONS TO THE PATIENT DATA: (changes underlined)

HOSPITAL ID NUMBER = 360029

PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE •	DATE OF DEATH	PRINCIPAL DIAGNOSIS	PRINCIPAL PROCEDURE
[redacted]	[redacted]	CA	069	M	09/29/86	10/04/86	10/04/86	19889	3491
[redacted]	[redacted]	CA	079	M	12/05/86	12/09/86	12/09/86	1629	
[redacted]	[redacted]	CE	082	M	09/19/86	10/06/86	10/18/86	436	
[redacted]	[redacted]	HM	080	M	10/29/86	11/15/86	11/15/86	2765 (PRO change)	
[redacted]	[redacted]	HS	077	M	01/26/86	02/01/86	02/01/86	4281 (PRO change)	
[redacted]	[redacted]	UN	067	M	01/19/86	01/21/86	01/21/86	4660	

**WOOSTER
COMMUNITY
HOSPITAL**

1761 Beall Avenue
Wooster, Ohio 44691
(216) 263-8100

COMMENTS ON THE HCFA MORTALITY DATA
WOOSTER COMMUNITY HOSPITAL, WOOSTER, OHIO
MEDICARE PROVIDER NO. 360036

Data Verification:

The data used by HCFA indicate that a total of 137 Medicare patients admitted to WCH died within 30 days of admission. Of these, 115 died while still a patient, while 22 are reported as deaths after discharge. Our own records indicate that 1,572 Medicare admissions occurred in 1986. The 510 inpatient visits discrepancy presumably reflects readmissions of chronically ill patients or transfers to other acute care facilities. We have no way of verifying the 22 post-discharge deaths, but our records do indicate that the 23rd HCFA reported post-discharge death [redacted] occurred in the hospital, with a 6/23/87 date of death). Verification of 115 inhospital deaths is correct.

Interpretive Remarks & Unique Services Offered:

Wooster Community Hospital's actual mortality rate for 1986 was less than the range of predicted mortality rates. The number of elderly patients treated is reflective of the large elderly population served by our hospital, with Medicare patients comprising 27% of our total admissions and 37% of total patient days in 1986. In looking at 3 of the 5 variables which HCFA used in their statistical method, age, readmissions and co-morbidity, 39% of our patient deaths were in patients over age 80, 20% had had prior hospital visits in 1986, and 80% had 3 or more co-morbid conditions which helped to complicate the principal diagnosis.

In was not surprising that over half of the deaths (52%) were in two general categories of diagnosis, cancer patients and heart patients. Wooster Community Hospital has an oncologist, plus several surgical specialists who see a high number of cancer patients. Wayne County also has an active Hospice Program. Our coronary services also treat a large patient population. There were 28 cancer patients who died (20% of total deaths), thirteen of these patients were classified in other diagnostic categories, such as metabolic disorders. There were 44 patients who died of heart disease (32% of the total deaths), several of whom had prior hospitalizations beause of their deteriorating cardiac status.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

The HCFA data unfortunately does not address quality of care, specifically the severity of illness and the intensity of treatment. We found that 34 (25%) of these patients were in terminal stages of disease and 40 patients (29%) presented with acute, severe problems and died within 24 to 48 hours of admission. Since Wooster Community Hospital has had a comprehensive QA program in effect since 1973, we will continue to review all patient treatment which includes peer review of all deaths.

Wyandot Memorial Hospital
885 NORTH SANDUSKY AVENUE • UPPER SANDUSKY, OHIO 43351 • (419) 294-4991

October 20, 1987

Office Of The Administrator

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, MD 21207

Gentlemen:

Reference is made to the letter from William L. Roper, M.D., Administrator, Health Care Financing Administration, dated September 21, 1987, transmitting the mortality information for Wyandot Memorial Hospital and informing us that we have an opportunity to respond on the data and have that information published with the data. The following is our response:

> While we recognize that the Health Care Financing Administration's (HCFA) figure of 383 reflects only the last admission to our hospital for 1986, we are unable to verify the HCFA data at this time since our figures show total admissions in the mid to high 500's. We have, however, checked the medical records of the patients in two (2) diagnostic categories where the mortality rate was at or toward the high end of the range of predicted mortality rates. In one of the diagnostic categories, four (4) out of seven (7) patients who comprised the mortality rate had "DO NOT RESUSCITATE (NO CODE)" (DNR) orders on the chart. In another diagnostic category three (3) out of four (4) patients had DNR orders on their chart. Therefore, these patients were expected to die. Deleting these cases, the adjusted mortality rate in the first diagnostic category drops from 64% to 27% which is at the low end of the predicted range of 13% to 65%. In the other diagnostic category the adjusted mortality rate drops from 57% to 14%. Once again, at the low end of the predicted mortality rate range of 10% to 72%.

Sincerely,

John D Harbaugh

John D. Harbaugh, FAAMA
Administrator

xc: Ohio Hospital Association
Peer Review Systems, Inc.

JDH/vu

COMMENTS ON THE HCFA MORTALITY DATA

WESTERN RESERVE CARE SYSTEM, YOUNGSTOWN, OHIO

The data used by HCFA indicated that a total of 525 Medicare patients admitted to Western Reserve Care System in 1986 died within 30 days of admission. Of these, 441 died while still a patient of the hospital, while 84 died after discharge. Western Reserve Care System's actual mortality rates, as calculated by HCFA, fell below or within the predicted ranges within each category.

Western Reserve Care System is an 898 teaching bed tertiary facility serving a tri-state area. The services provided to the community include specialties in oncology/hematology, cardiology, women's health, psychiatry, renal, physical medicine rehabilitation and general medical-surgical expertise. Due to these services provided, the hospital is utilized as a referral base for other area hospitals in the treatment of the more acutely ill patient population. The hospital is actively involved in providing quality of patient care to all individuals which is monitored through the multi-disciplinary hospital Quality Assurance program.

TECHNICAL APPENDIX

METHODOLOGY

The Data Base

The basis for the present analyses is the MEDPAR file assembled and updated quarterly by the Bureau of Data Management and Strategy in HCFA. This file is constructed from information on hospitalizations submitted to HCFA by hospitals through fiscal intermediaries and from data obtained from the Social Security Administration describing certain characteristics of the patients including age, sex, race and the date of death. Because each Medicare beneficiary is assigned a unique health insurance claim number (HIC), it is possible to link hospitalizations longitudinally to ascertain prior and readmissions, and the date of death whenever and wherever it occurred.

The process of data management consisted of the following steps:
(1) admissions to acute-care hospitals were selected, as was the array of data needed to characterize the patient and the hospitalization;
(2) the first- and last-occurring hospitalizations, their nature as out- or in-transfers, and the number of admissions prior to the last of a given patient in a given calendar year were identified,
(3) patients were assigned to major diagnostic categories by means of the principal diagnoses, their additional diseases identified on the basis of the secondary diagnoses, of which there were up to four for each hospitalization, and separate files were written for each diagnostic category for the first- and last-occuring hospitalization respectively. Analyses were performed on the separate files. For the purpose of assessing overall mortality rates, results obtained for the individual diagnostic categories were aggregated. As a check on the programming, a summary file of the hospital-level data was also written and analyses of this summary file were compared with the results of aggregation of the files for the diagnostic categories.

In this project, the basis used for the assessment of mortality rates was death within 30 days of admission. However, because readmissions can occur within the interval between admission and 30 days thereafter, to avoid multiple counts of deaths, the last-occurring admission in a calendar year was chosen because it is associated with the highest risk of death. The prior experience of the patient was taken into account by identifying whether the last-occurring admission represents a transfer from another acute care facility and by identifying the overall number of prior hospitalizations in the year.

The composition of the diagnostic categories and of the comorbidities was determined in part empirically and in part on the basis of clinical judgment. The diagnostic categories used in these analyses were chosen to follow medical disciplinary lines and to report principally on high-risk admissions but also on certain low-risk admissions. The empirical testing consisted of the computation of the relative risk of death associated with the category or comoribidity compared to that isn a reference population by using standard statistical techniques (The Cox Proportional Hazards Model). A committee of clinical advisors was assembled to review alternatives and to assist in the design of an appropriate classification scheme. The approach adopted for the present analyses is the result of their deliberations and advice.

A list of the ICD9-CM codes included in each diagnostic category and comorbidity is found on the following pages.

Analytic Techniques

The principal analytical tool was logistic regression. Because the diagnostic categories are mutually exclusive, the analyses to ascertain the influence of patient characteristics (age group, sex, comorbidities, prior admissions and transfer status) were carried out separately for each category. If p is the probability of a given patient dying within 30 days of admission, its dependence on the patient's characteristics x_i (covariates) is specified by the logistic model as

$$\log \frac{p}{1-p} = \Sigma_i b_i * x_i .$$

Once the coefficients b_i have been computed, it is possible to estimate the predicted probability of dying for that patient, and, by averaging over all the patients whose treatment in a given hospital is being evaluated, the predicted mortality rate for that hospital for the individual diagnostic category as well for all categories taken together.

The second quantity required of the analyses was an estimate of the uncertainty in the mortality rate expressed as a range of predicted rates encompassing a specified proportion (95%) of the probable values. For this it is necessary to compute the variance of the probability of death at a given hospital. This quantity is conventionally taken to consist of the sampling variance and of the variance due to the uncertainty in the estimates of the regression coefficients. The latter, given the very large populations used to estimate the coefficients, is negligible compared to the former, and was confirmed to be so by direct calculation.

DIAGNOSIS		ICD-9-CM CODES*
High Risk		
CA	Cancer	141-160, 162-172, 174-209
CE	Stroke	430-432, 434, 436
HS	Severe acute heart disease	410, 427.1, 427.4, 427.5, 441.0, 441.1, 441.3, 441.5, 441.9, 785.51
HM	Severe chronic heart disease	398.91, 402.01, 402.11, 402.91, 425, 428, 518.4
GC	Gastrointestinal catastrophes	551, 557, 560.0, 560.2-560.9, 570, 572-572.7, 573.4, 567, 578.0, 578.9
ME	Metabolic and electrolyte disorders	250.01-250.4, 251.0, 251.1, 255.4, 276
PN	Pulmonary disease	415.1, 416.0, 480-483, 485-516, 518-519, except 516.1, and 518.4
RN	Renal disease	580-590 except 580.81 and 590.81
SE	Sepsis	DRG: 416, 417
TR	Severe trauma	806, 808.43, 808.53, 820, 821, 828, 850.2, 850.4, 851.1-851.7, 852, 839.0-839.5, 860-867, 887, 897, 900.0, 901-904, 926, 927.0, 928.0, 929.0, 942.3, 942.4, 942.5, 946.3-946.9, 947.1-947.9, 948.2-948.9, 952, 958.0, 958.1, 958.4, 958.5
Low Risk		
EY	Ophthalmologic disease	360-379
GY	Gynecologic disease	617-629
HL	Low risk heart disease	393-429, except 415.1 and 416.0 and cases in categories HS and HM
GI	Gastrointestinal disease	530-579, except 577.0, 573.1 and 573.2 and cases in category GC
GU	Urologic disease	593-609
OP	Orthopedic conditions	712-739, 810-838, 840-848 (excluding cases in category TR)
UN	All other Conditions	All other ICD 9 CM Codes

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*All of the above entries refer to ICD-9-CM codes except for the entries for Sepsis which are expressed in terms of Diagnosis Related Groups (DRGs).

COMORBIDITY	ICD-9-CM CODES
Cancer	141-160.9, 162-172.9, 174-208.9
Chronic liver disease	571-572.8
Chronic renal disease	582-583.9, 585-587
Chronic cardiovascular disease	412-414.9, 426-429.1
Chronic pulmonary disease	491-493.9, 496
Cerebrovascular degeneration/ chronic psychosis	290-290.9, 294-299.9
Hypertensive disease	402-405.99, 412-414.9
Diabetes	250.01, 250.1-250.9

(A comorbidity is taken to be present if its ICD-9-CM code appears on the bill as any one of the up to four addtional diagnoses beyond the principal diagnosis.)

The sampling variance for the computation of the range of predicted mortality rates is approximately estimated by

$$[P * (1-P)]/N$$

where P is the proportion who had died of persons at risk, N, within a specified diagnostic category (or overall).

The (negligible) component of variance of the overall mortality rate, due to the regression coefficients is estimated approximately by

$$\Sigma_{i}[\Sigma_{k}\Sigma_{k'}p_{ijk}*(1-p_{ijk})*p_{ijk'}*(1-p_{ijk'})*x_{ijk}*C(b_{i})*x_{ijk'}]$$

where the subscripts k and k' refer to individual patients, i to the diagnostic category, and j identifies the hospital. However, given the potential systematic differences among hospitals in the severity of illness of their patients, in the quality of care they receive and other unidentified factors, a further contribution to the variance, the interhospital variance, must be considered. This constant term is estimated by

$$\mathrm{IHV} = \Sigma_{j}(P_{j}-\overline{P})^{2}*(N_{j}/N_{t})*(1-1/N_{j})$$

where P_j is the predicted mortality rate, N_j the number of cases at risk at hospital j, N_t the total number of cases at risk, and $\overline{P}$ the average mortality rate, in the category under consideration. In computations using standardized residuals, the sampling variance was based on the observed mortality rate. The difficulty engendered by the occurrence of a zero mortality rate in some hospitals was overcome by a Bayesian approximation in which the mortality rate, D/N, was replaced by (D+1)/(N+2), where D is the number of persons who died and N is the number at risk.

The ranges of predicted mortality rates given in this publication encompass 95% of the probable values on a logit scale to ensure that the range neither goes below zero nor above 100%. On the logit scale, the range of predicted values, P, is given by

$$R = \log \frac{P}{1-P} \pm 1.96 \frac{\sqrt{[P*(1-P)/N + \mathrm{IHV}]}}{P*(1-P)}$$

Retransformed to the linear scale, the upper end of the range is

$$\exp(R_{+})/(1+\exp(R_{+}))$$

and the lower end of the range is

$$\exp(R_{-})/\exp(1+R_{-})$$

where R_{+} is the value of R taken with the (+) sign and R_{-} is the value of R taken with the (-) sign.

Two subsidiary analytical approaches were employed both as checks of the programming and the computational algorithms, and as validation tools. One was multiple linear regression in which the unit of observation was the hospital, the dependent variable the proportion of persons at risk who had died, and the independent variables within the specific diagnostic categories the proportions of the persons at risk within given characteristics used in the logistic regression. Thus, a direct comparison of the results of the logistic and the linear models was made in the case of the specific diagnostic categories. However, whereas in the computations based on logistic regression results for overall mortality were simply obtained by aggregation of the specific categories (including "Other"), in multiple linear regression analysis of this quantity, the diagnostic categories were used as covariates, along with the other patient characteristics.

The other alternative approach consisted of indirect standardization of mortality rates. The population at risk in each diagnostic category was subdivided by age-group and sex into cells within which average mortality rates were calculated. These rates were then used to compute predicted mortality rates for the age and sex-mix of each hospital.

In addition to the above, cross-validation and boot-strap analysis were used to explore the properties of the models in selected diagnostic categories. In cross-validation, the entire population at risk is randomly divided into two equal subsets and regression analyses are performed on each subset. Predicted mortality rates for the hospitals are computed both directly within each subset and by use of the patient characteristic of a given subset and the coefficients obtained in the other subset. This approach essentially tests the reproducibility of the estimation of the regression coefficients. In boot-strap analysis, replicate populations are constructed by sampling with replacement from each hospital's population. These replicate populations are of equal size but differ from each other in case-mix. Regression analyses are then performed independently on each boot-strap replicate.

Rank-order (Spearman) correlation coefficients of standardized residuals, the difference between the actual and predicted mortality rates divided by the standard error of that difference, were used to compare the results of the various analyses. In addition, the reproducibility of the identification of "outliers", hospitals whose standardized residuals were above +1.96 or below -1.96, was evaluated by ascertaining what fraction of outliers found in one year were still outliers in a subsequent year and what proportion of outliers on first-occurring admissions in 1986 were also outliers when last-occurring admission were analyzed.

SUMMARY

The tabulation of the numbers of cases at risk (i.e. the number of patients whose last discharge in 1986 was from the given hospital), of the percentage of these persons who died within 30 days of the date of admission for that hospitalization, and of the range of predicted mortality rates encompassing 95% of the probable values on the logit scale forms the core of the present publication. The observed overall mortality rates of approximately 4% of the hospitals place them more than 1.96 standard errors above the rate predicted for the case-mix of the patients of that same hospital. However, this quantity is very dependent on the precise formulation of the variance. If the interhospital variance is omitted, the number of "high outliers" rises to about 11%. In contrast, the number of "high outliers" computed by means of multiple linear regression is 2.5%. However, the variance, or more precisely, the standard error appears to behave as a scale factor affecting the shape of the distribution but to have little influence on the position of a hospital relative to the others. Thus, the Spearman correlation coefficient of residuals and of standardized residuals is about 0.95, i.e., the order is determined predominantly by the residual itself, the difference between the observed and the predicted mortality rates.

The stability of the predicted mortality rates when the case-mix of the hospital is held constant is attested to by the results of cross-validation: the Spearman correlation coefficients of standardized residuals calculated from the vector of covariates and regression coefficients estimated in the same subset with standardized residuals obtained from the same vector of covariates but regression coefficients estimated in the complementary subset are 0.99 or higher for various diagnostic categories including the most heterogeneous, cancer. In contrast, the Spearman correlation coefficients of standardized residuals obtained in successive boot-strap iterations, in which the case-mix of the hospital is allowed to vary but other characteristics are implicitly held constant, lie in the range 0.6-0.7. The implication of this last, which bears importantly on year-to-year stability of rankings, is that there remain important causes of variability in outcomes associated with variations in patient characteristics (such as severity of illness) and other factors that have not been taken into account in the models used in the present analyses.

Comparison of standardized residuals obtained by logistic regression at the patient level and by linear regression at the hospital level yields Spearman correlation coefficients that lie in the range 0.92-0.99 for the specific diagnostic categories. For the overall mortality rate, the Spearman correlation coefficient is 0.83. However, in this instance the logistic and linear model are specified differently. In the

logistic model, the results for overall mortality are obtained by simple aggregation of the results of the analyses of the specific diagnostic categories, plus the category "other", whereas in the linear model the diagnostic categories are treated as covariates. A rank-order correlation coefficient of 0.89 is also obtained when overall mortality assessed by indirect standardization is compared with the results of logistic regression. Multiple linear regression gives a convenient estimate of predictive power in the proportion of the variance accounted for by the model. For last-occurring admission and specific diagnostic categories this lies in the range of a few percent to 37%, the latter applying to the category "cancer." For overall mortality, this quantity is 59%. Almost the entire (95%) predictive power of the model for overall mortality is accounted for by ten patient characteristics: age over 85, severe acute heart disease, sepsis, pulmonary disease, cancer as a comorbidity, cerebrovascular accidents, renal disease as a comorbidity, metabolic and electrolyte disturbances, severe chronic heart disease, and age between 70 and 74.

The validity and utility of the approach used herein is best tested by comparing the results of analyses of first-and last-occurring admissions in the same calendar year and of patterns observed in successive years. When comparing first-and last-occurring admissions it is important to note that about two-thirds of hospital patients have only one discharge in a given calendar year and that one-third have multiple admissions. Therefore, some correlation will be forced by the overlap of first and last-occurring admissions. The average probability of death within 30 days of a first-occurring admissions in 1986 was 6.9% and that for the last-occurring admission was 11.7%. Clearly, these hospitalizations are associated with very different risks. For 1986 discharges, the Spearman correlation coefficient of standardized residuals for first-and last-occurring admissions was 0.83. In addition, about two-thirds of the hospitals identified as high outliers for first admissions were also high outliers based on analysis of outcomes of last-occurring admissions (71% if the interhospital variance term was not used in the calculation of the standardized residual and 64% if it was).

The Spearman correlation coefficients of standardized residuals for last-occurring admissions in 1985 and 1986 were 0.61 (0.57 if the interhospital variance component is included in the variance) and 0.51 (0.48) when 1984 and 1986 rankings are compared. The concordance of high outliers in 1985 and 1986 was 48% and for 1984 and 1986 it was 44%.

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